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# EVALUATION OF THE FINCA/BOLIVIA

# COMMUNITY REVOLVING FUND PROGRAM

by

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# I. INTRODUCTION

## The Setting and Objective

This document is an evaluation of a new and unique credit program for small rural Bolivian communities. This program, the Community Revolving Fund Program, was established in Bolivia on July 1, 1984, with funds provided by the United States Agency for International Development (USAID) under PL. 480, Title II. The purpose of the program is to create a locally-controlled system of rural community credit and capitalization to finance sustained, self-help development activities on a individual and/or collective project basis. The Community Revolving Fund Program is administered by a non-profit organization, Fomento Integral Campesino (FINCA). As of June 30, 1985, one year after the Community Revolving Fund Program was established, FINCA had lent a total of $b 2,066.6 million to 433 communities benefiting 24,289 rural families.

It should be noted that the Bolivian program is the largest and most well-developed of a network of similar programs in four Latin American countries. The coordinating and fund raising agency for all of these programs is the Foundation for International Community Assistance, which is headquartered in New York City.

Therefore, it is propitious at this time to constructively study and evaluate the Bolivian program since the Foundation for International Community Assistance has plans to

expand the program in Bolivia as well as to extend it to a total of nine Latin American nations. It is hoped that this evaluation will provide useful information, not only to program planners, but also to potential donors of the funds that will be needed for program expansion.

## Scope of Work

The scope of work in the evaluation process was specified by USAID as follows:

1. Compute and assess the loan transactions costs for the borrower and for the program.
2. Evaluate the program's indexation system in terms of farmer acceptance, capitalization and management implications; and assess the success or failures that the communities have had in marketing the produce collected for fund capitalization and amortization.
3. Determine the program's nominal interest rates and compare them with the rates of other Bolivian credit systems.
4. Assess the timing of credit delivery.
5. Evaluate the use of credit and its impact on small farmer family economic improvement and standard of living.

6. Determine in what ways and under which circumstances and conditions the program successfully capitalizes the communities and under what conditions the program fails to reach this objectives. Provide an analisis and projection of community capitalization resulting from the initial project provided loan, based on results obtained through May-June 1985.
7. Evaluate the rates of, and reasons for, loan delinquency.
8. Assess the effectiveness (i.e. purpose/objetive coverage) and efficiency (i.e., cost minimizati on) of the programs, institutional structures for promoting, delivering, providing and recuperating loans, including personnel, organization, employment, supervision, orientation and support.

## The General Criteria Applied in the Evaluation

The analysis requested in the scope of work can be rephrased into two basic criteria.

1. The impact of the credit program on the communities and their members should be positive and create opportunities for long-run economic growth for both the communities and their members.
2. The credit program should be financially viable in the long-run for both FINCA and the communities. This

implies that both FINCA and the Rotating Credit Funds should be capitalizing, the program should be cost efficient in administration and credit delivery, and the member acceptance of the program is high.

## Methodology Employed in the Evaluation

### Tasks

The first task was to understand the program and how it is designed to function. The second task was to draw upon theory and practice of rural financial markets to select indicators that would enable an evaluation of the program design and performance. The third task was to obtain information on these indicators. The final task was to undertake the analisis of the indicators, and draw conclusions.

### Information

Four basic sources of information were utilized in this study. The first source consisted of background information consisting of documents, USAID correspondence and FINCA reports and records.

The second source was detailed information on program activity, lending, repayment, financial records, etc., made available through the central office of FINCA. The third source consisted of personal interviews with FINCA personnel including those of the Central Office, outside advisors, regional supervisors and local promotors. The fourth source

consisted of detailed interviews with 522 members of twelve communities that were ramdomly selected in a cluster sampling framework. The sample population was limited to the 256 communities that had received a loan from FINCA and were programmed to have made an installment payment on that loan by the end of June 1985. In this way, the study only worked with communities that had gone through the full loan cycle, a condition that was necessary to analyze all aspects of the credit and repayment processes.

Explanation of the Sample Survey

The nature of the FINCA program, with the 256 widely disbused communities, many of which are located in remote and somewhat inaccessable regions, create serious prblems for obtaining the required information through a sample survey within the constraints of time and budget. Ideally, it would have been best to have had information from a random sample of a sufficiently large number of communities and their members to be able to make statements, that were within acceptable tolerances for error, about the whole of the communities and their members that are involved in the program. A rough estimate range of the number of communities that would need to be sampled is 50 to 100. The problem is further complicated, however, by the fact that if one wants to make statistical inferences about the community memebers of any given community, it is necessary to interview almost all members of each community. The reason is because the size of most communities

is small. Given the dispersity of the communities and the limited budget and time this approach was not feasible.

A second best alternative was selected that could be accomplished within the time and budget constraints. In this manner, in-depth information would be available, on a case study basis, for each community selected. In addition, it would be possible to make generalizable statistical inferences to the whole program , about the community members' attitudes and about acceptance of the program. A computer simulation model was employed to design the sample by examining the trade offs between acceptable tolerances of error and cost. It was decided that a random sample of twelve communities was appropiate. To take account of different sizes of communities, the 256 communities were ranked by size. Then a number between 1 and 256 was chosen at random, which corresponded to one community. After having identified this community the others were determined by selecting each succesive twenty-first community on the list.

In practice, it was necessary to make two adjustments in the communities included in the sample. One of the selected communities in La Paz department told FINCA that it refused to cooperate. In this case, the next community on the list was selected. In another case, the interview team in Sucre was advised not to enter one region because of politically-based road blocks. The team did not have access to the list of communities and arbitrarily selected a community near the city of Sucre.

The interviews were carried out by two teams,each operating in different regions. Interviewers were requiered to be able to conduct their business in Aymara or Quechua,when the situation required. The team leaders, Lic. Gonzalo Afcha and Lic. Issac Torrico, both of whom have extensive experience in agricultural credit and hold M.S. degrees in economics from U.S. institutions, held separate sesions with the community commitees, the FINCA promotor and the FINCA supervisor, when the latter were available.

## Organization of Report

The report is organized as follows. The second chapter presents an overview of FINCA, its relationship to FINCA International and the structure and operations of the credit program, both at the FINCA level and the level of the participating communities. The third chapter examines the impact of the program on the communities served. The fourth chapter analyzes the various dimensions of capitalization in the FINCA program. This discussion on concentrated on sources of capitalization and problems with capitalization including delinquency. The fith chapter examines the credit delivery system for both the lender and the borrower with emphasis on interest rates, loan terms and transactions costs. The final chapter presents a brief summary and general recomendations.

Each chapter is organized in specific sequence. First, a description of the program design as it applies to the topic

of the chapter is presented. Second, as part of evaluation, an analysis of the design is undertaken, to identify strengths and weaknesses of the design. Third, the empirical results resulting from the analysis of FINCA records and the sample survey are presented. Finally, conclusions are drawn.

## II. OVERVIEW OF FINCA

To set the stage for the evaluation, this chapter presents a detailed overview of the structure and operations of FINCA as well as a general description of the design and the function of the rotating community credit funds. The specific analysis of the program functions follows in the succeding chapters. The present chapter is organized in five subsections:

(a) the history of FINCA, including its establishment, goals, sources of funding and program implementation; (b) the relationship between FINCA and FINCA-International; (c) the description of the design of the community credit program; (d) the organization and structure of FINCA;and (e) the new innovations in FINCA's programs.

### History of FINCA

#### Establishment

The FINCA program was established on July 1, 1984, with the decision by USAID to establish the FINCA Revolving Credit Fund using the equivalent of local currency, in the amount of aproximately 1.3 million dollars at the official exchange rate (about 2.8 billion pesos), that had been generated from the PL. 480 sale of rice following the 1983 draught.

The program's beginning might be considered the result of a fortuitous and simultaneous coming together of several major factors. A U.S. consulting firm, Rural Development Services (RDS), had conceived the idea of the community development funds. RDS was undertaking several contracts in Bolivia, including that of the emergency sale of rice. Beginning in 1983, they established pilot community rotating rural projects in twelve Bolivian communities. Enthused with the results of the Bolivian pilot projects, as well as with other preliminary trials in Costa Rica, Nicaragua and El Salvador, RDS decided to make a major committment to extend its program, but it needed outside funding.

USAID was in the position to provide the funding for Bolivia with the receipts from the sale of rice from the PL.-480 program. Moreover, USAID was intrigued about the possibility of assisting the Bolivian rural poor through a credit program that had a built-in feature to protect the lender against decapitalization by the hyperinflation the country was experiencing. By this time, this inflation had seriously decapitalized and virtually inmobilized most of the existing small-farmer credit programs. In addition, the program provided USAID an opportunity to continue its emergency relief program, but without the need to spend hard currency. In this regard, because of RDS's experience in distributing rice to the Bolivian rural poor,the consulting firm was in the position to quickly identify communities to participate in the program. Moreover, RDS already had a team of trusted employees

who could easily been incorporated into the program. Therefore, under RSD leadership, start-up cost, and time requirements would be low. The program appeared to be well suited for quick implementation.

The program called for the establishment, within a three month period, of FINCA as the legal entity to manage the project in Bolivia. Until that time, RDS was contracted to administer the project. RDS promptly hired the persons to work on their staff, who would eventually become the administrators of FINCA, when it became a separate entity in February 1985.

Program Goals

The new program had ambitious goals. In the first year it was expected that Community Revolving Funds (FRC's) would be established in 630 communities and reach about 31,600 rural families in seven rural departments: La Paz, Oruro, Potosi, Chuquisaca, Tarija, Cochabamba and Santa Cruz. Priority areas were to be those regions most impacted by the draughts of 1983.

There appears to be same ambiguity about project goals from the perspectives of USAID and FINCA. USAID was anxious to use the PL 480 funds available from the rice sales to assist in recapitalizing the farmer who had been seriously and negatively impacted by the draught. The RDS proposal was a convenient and handy vehicle to get this done USAID was not convinced that the project necessarily would blosson into a meaningful long-run development program for rural Bolivian

communities. In contrast, RDS was confident that its program would work and was most pleased to have access to the PL 480 funds to implement it.

Sources of Funding

Funding for the program came from three sources. First, 2.8 billion pesos were assigned from the PL 480 program to capitalize the FINCA Revolving Credit Fund and to cover part of operations expenses. Second, USAID made a separate donation of 196 million pesos to aquire seven vehicles from the Project for Disaster Recovery. Third, RDS made a committment to raise another 100 million pesos from other external donors, as a contribution towards operations costs.

FINCA received an additional grant, effective July 1, 1985, in the amount of $ 98,440 from the Inter-American Foundation. This grant includes funds to capitalize the FINCA Revolving Credit Fund, to cover some operational expenses, to purchase a computer for the Central Office and to provide some external technical asistance.

Program Implementation

The program was implemented rapidly. Six regions were established; Santa Cruz was eliminated. The first loan to a community was made on 18 july, 1.984. By 9 December of that year all loans for the first year had been extended in the total amount of 2.1 billion pesos to 433 communities, benefiting 24,289 families. In May 1985, FINCA obtained its legal status.

RDS still plays a very important role in two ways: as a consultant to FINCA and its connection with FINCA-International.

## FINCA International

The design of the Bolivian FINCA program, as well as those that RDS had initiated in the other three countries, specified the need for external fund raising to provide financial resources for the programs. To facilitate this process the President of RDS, Dr. John Hatch, established the Foundation for International Community Assistance (FINCA-International), which was legally incorporated in the State of New York in September 1984 as a non- profit, non-political and non-sectarian organization*. FINCA International has two main objectives. First, to mobilize resources by means of donations from individuals and corporations as well as from public grants when possible and appropiate. Second, these resources are to be used to finance the revolving rural credit funds for community development programs in the participating countries. To do this, it works with the host countries to establish domestic non-profit foundations, such as FINCA in Bolivia, to administer the programs.

Among the existing programs in Bolivia, Costa Rica, Nic-

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*This Organization also uses the acronymn FINCA. In this repor to distinguish from FINCA in Bolivia, it is referred to as FINCA- International.

araqua and El Salvador, the Bolivian program is by far the largest, mostly because of the USAID grant. In the future, FINCA-International has major plans to rapidly expand its community development programs not only in the above four countries but also to Brazil, Colombia, Honduras, Mexico and Peru. By 1990 its goal is to reach a total of 2,000 rural communities (about 100,000 families) in the nine countries.

It is important to recognize the strong linkages between RDS and the development of FINCA-International and the several country programs. Indeed, they are highly interdependent and focus around one key person, Dr. Hatch. He, along with only a handful of persons, are the key actors in the process. Especially important is Lic. Aquiles Lanao Flores, a peruvian partner in RDS. Lic. Lanao has the major responsability for organizing and implementing the country programs. The heavy dependence of FINCA-International on only a few key persons could create problems for the country programs in the future, were the program to lose the service of one or both of these key persons.

## The Design of FINCA's Community Credit Program and the Capitalization Mechanism

The funds obtained by the grant from USAID were placed in FINCA's Revolving Credit Fund. From this fund, FINCA makes loans on an interest- free basis to the participating communi-

ties to establish a Rotating Community Fund (FRC). These loans are for a period of four years with a one-year grace period (to account for times of bad harvests). The community assumes the obligation to repay the principal back to the FINCA over the four-year period. Simultaneously, it is supposed to capitalize its fund, such that, at the end of the four-year period the community has its own fund in the equivalent to the amount of the original FINCA loan.

A unique feature of the program is the manner in which it is designed to combat the ruinous impact of inflation on money balances. All loans and repayments from FINCA to the communities and from the communities to their members are made in real terms, by indexing them to the price of a key agricultural/livestock product in the community. Assuming that the prices of these products will fluctuate more-or-less in accordance with the rate of inflation, the real values of the communities' FRCs and FINCA's Revolving Credit Fund are to be protected.

In order to spread the resources of the Revolving Credit Fund more widely, FINCA has established a norm of making the size of a loan to a community depend upon the number of participating members. A uniform quota of credit per member is established. Therefore, the size of the loan is the product of the quota and the number of participating members. The quota is pegged to the price of the indexed product. For example, a typical loan is indexed to a quintal of potatoes and the quota per member is two quintales. Thus, if a community

had 100 members and each member received a loan equivalent to the value of two quintales of potatoes and the price of the quintal was $b.10,000 then the community would receive a loan of $b. 2,000,000 (100 families x 2 quintales x $b. 10,000 per quintal).

Upon receipt of this loan, the community has the initial funds for its FRC. The community assembly elects a three person community committee to oversee the fund. The community assembly decides how it wants to use the fund. There are three alternatives. First, the monies may be distributed to each of the participating members as individual loans in the amounts equal to member's quota. In this case the members use the funds for whatever they desire, but with the obligation to repay them to the FRC at the specified maturity date. Second, the community may decide to use the FRC to undertake the purchase of a community good, such as material to build a meeting room, storage building, etc. In this case, each member assumes the responsibility to repay the FRC the amount of their quota at the specified maturity date. The third alternatives is a combination of the first two.

Under any of the above three alterantives, the members assume an obligation to repay the FRC on the specified maturity date. This repayment is called FRC capitalization.

In addition, the community must ammortize it's loan from FINCA. To accomplish this, each participating member must make a payment equivalent to one-fourth of their loan from the FRC. Thus, after the community has relent the FRC to its

members for four succeding years, the total amount repaid to FINCA will be the equivalent of FINCA's original loan to the community. If a community desires, it can repay its loan to FINCA in full at any time. When the community has completely ammortized its original loan to FINCA it is eligible for another FINCA loan. If it obtains another loan of the same size as the original it will double the size of the FRC. Therefore, in each succeeding four-year period it will increase the size of the FRC.

The real value of the FRC and the repayments to FINCA are maintained by the product indexation system. The member does not repay his obligations to FRC or FINCA in cash, but rather in units of the indexed product. To follow the earlier example, where the community received a loan based upon the price of potatoes, each of the participating members would repay their capitalization to the FRC in the amount of two quintales of potatoes. These potatoes would be sold by the community and the money deposited in the FRC. In this way the real value of the FRC per member remains at two quintales of potatoes. Alternatively, the community might decide not to sell the potatoes immediately, but, rather put them in storage, hoping for more favorable prices in the future.

Likewise, the amount paid by each member to amortize the loan to FINCA is also paid in potatoes. In the above example, the amount would be two arrobas. FINCA assumes the responsibility for collecting and marketing this portion. The proceedes are deposited in FINCAS's Revolving Credit Fund.

To summarize, according to the program design, at the end of the four-year period the community is the owner of the FRC and FINCA has been repaid in full. The community can apply to FINCA for another loan. In the meantime, the monies that were paid to FINCA each year have been placed in the FINCA Revolving Credit Fund and are available for lending as new loans to participating communities or to extend the program to other communities. Because of the product indexation feature, neither the FRC's nor the Revolving Credit Fund should have lost any significant real values. In this manner, the community FRC's and the FINCA Revolving Credit Fund would continue to operate indefinitely.

## FINCA's Organization and Structure

Finca has the legal status of a Bolivian non-profit organization. It's highest authority is the seven-person Board of Directors. The board has three campesino members, who represent the communities with loans from FINCA, three Bolivian professionals, and Lic. Aquiles Lanao who represents FINCA International.

The Central Office staff consists of a president, who reports directly to the board, an accountant, a secretary and an office boy. The work of the Central Office is to administer the program, keep centralized records and accounts and prepare reports. The Central Office staff is often assisted by Lic. Lanao and less frequently by Dr. Hatch, under the RDS consulting contract with USAID to provide services to FINCA.

There are six regional supervisors who report directly to the president. Under the supervisors there is a total of fourty-two promoters who, on the average, work with ten communities each. The promoters are selected from local persons who have a peasant background and live in or nearby the rural communities they serve. It is the promotor's responsibility to carry out the routine aspects of FINCA's relations with the communities, often times in collaboration with the supervisor.

The operations of FINCA are highly descentralized, with considerable autonomy and authority given to the regional supervisor. Each supervisor maintains a FINCA bank account for funds from the Revolving Credit Fund in his region, in which deposits of ammortizations are placed and from which new loans in the region are withdrawn. The regional supervisors are responsible for maintaining complete records on FINCA operations in their regions, which are then sent forward to the Central Office.

## FINCA's Relationship to Other Programs

FINCA's position of serving a large network of rural communities has made the organization a good mechanism to serve as a broker for other organizations to reach rural communities. In this capacity FINCA works several different organizations that offer food for work, such as Food for the Hungry. Under these programs FINCA identifies community projects that are elegible for this assistance and takes the paperwork

to the other organization for approval. In practice, communities combine the Food for Work with the FRC credit. For example, the community decides to use the FRC for a project to built a potatoe storage building. The FRC monies are used to buy materials and Food for Work pays the pays the community members with food for their work on the project FINCA has brokered. Some fourty-six Food for Work porjects to date. The availability of this complementary program encourages FINCA's communities to undertake community projects.

USAID has a program to assit Bolivian farmers in obtaining agricultural implements and hard tools. Under this program farmers can buy goods imported at the official exchange rate. FINCA's community members have been given access to this program.

In a similar program the Inter-American Development Bank (BID) has made Bolivia a loan to be used to import implements and hard tools at the official exchange rate. FINCA has plans to obtain access to this funds for its participating communities. The Bolivian Agricultural Bank (BAB) has a special program for importing fertilizers under grants from Japan and Holland. BAB sells the fertilizers at subsidized prices. FINCA has been given a quota of this fertilizers. Members from the communities have obtained the fertilizers from the BAB warehouse.

In a role as a broker, FINCA is able to work with other programs to bring their services to the FINCA communities. In this manner they are able to be a multi-service organization

and offer facilities that are complementary to the credit program. In some cases, the communities have used the FRC to finance community projects that are supplemented by food-grants for work . In other cases, the community members are using their individual loans to obtain inputs, such as tools and fertilizers.

## III. THE IMPACT OF THE PROGRAM

The impact of the program is analized from four perspectives. First, it is examined in terms of its accomplishing the goals of the program in reaching communities. Second, it is studied from the perspective of the impact of the program's credit on the community. Third, the relative role of the FRC as a source of credit is examined. Finally, the members overall impression of the program is presented.

### Program Goals

At the outset it was planned that the program would reach 630 communities and 31,000 families in the first year. As shown in Table III.1 by the end of the first year the program served 433 communities and 24,289 families, which corresponded to 68.7 and 76.9 percent of the original goals, respectively. The program should not be faulted for not meeting its goals. Indeed, that it reached as many communities and families as it did is quite remarkable, especially considering that at the beginning of the program the real value of the portfolio was rapidly eroded due to the high inflation, which was about 8,000 percent over the first year of operations.

The rapid extension of the program to many communities was an important objective for both USAID and FINCA. In this regard the program would have to be considered as successful.

TABLE III.1

FINCA PROGRAM GOALS: FIRST YEAR
July 1, 1984 - June 30, 1985

| | Goal | Actual | Percent of goal obtained |
|---|---|---|---|
| Number of Communities | 630 | 433 | 68.7% |
| Number of Families | 31,600 | 24,289 | 76.9% |

Source: FINCA records.

## Impact of Credit

### Individual vs. Community Purpose Loans

There was no specific program design for credit use by the communities. About 93 percent of the communities decided to use the credit for relending to their members such that the members could use credit as they wished; only about 7 percent of the communities opted to use the credit for community projects.

### Uses of Credit and Impact on Production

The members surveyed were asked to indicate the three most important uses of their credit on the assumption that many members would use their funds for multiple purposes. The results are presented in Table III.2. There are four uses that stand out. It was estimated that 31.7 percent of the total program's members spent money on food, 29.6 percent on agricultural inputs, 25.6 percent on clothing and 20.8 percent on transportation. This suggests that there was a greater tendency to spend on consumption items than on productive activities*.

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*It is useful to explain the meaning of the estimated figures. The estimated figures, based on the members survey, that are reported in all tables in this evaluation should be interpreted as a characteristic for the whole population in the 256 communities surveyed. There is a certain margin of error in

This is borne out by the information presented in Table II.3. An estimated 26.4 percent of the members said that the credit enabled them to increase the output of the indexed product, 12.5 percent reported it increased the output of other agricultural products and 8.1 percent stated it increased the output of livestock production. The fact that so little of the credit went for productive purposes suggests that

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these estimates. In the tables of this evaluation, these margins of error are reported at the 95 percent confidence level, i.e., there is one chance in 20 that the true figure for the population falls outside the indicated interval. An example is in order. In Table II.2 it was reported that an estimated 31.7 percent of the population used their credit to buy food. We are confident at the 95 percent level that the margin of error is $\pm$ 9.2 percentage points from this number, i.e. within the limits of 22.5 and 40.9.

The size of the error will depend upon the variances within and between the communities in the cluster sample. Most generally the variances within the communities were not large. In some cases large differences in variances between communities were observed. In these cases the margins for error were relatively large. The variances reported in the table of this evaluation are the variances between communities. It can be noted that when the variance is large the wider are the relative limits for error around the estimated figure for the polpulation.

TABLE III.2

THREE MOST IMPORTANT USES OF CREDIT FROM FRC
BY COMMUNITY MEMBERS
(Estimated Percentage)

| USE | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| Agricultural Inputs | 29.6 | 0.0059 | 15.00 |
| Livestock Inputs | 8.0 | 0.0007 | 6.51 |
| Purchase of Livestock/ | 16.7 | 0.0030 | 10.80 |
| Construction and Repai | 7.6 | 0.0012 | 6.60 |
| Other Investments | 11.0 | 0.0024 | 9.50 |
| Transportation | 20.8 | 0.0074 | 16.90 |
| Clothing | 25.6 | 0.0051 | 14.00 |
| Household Articles | 23.7 | 0.0043 | 12.90 |
| Food | 31.7 | 0.0022 | 9.20 |
| Fiestas, weedings etc. | 6.2 | 0.0005 | 4.50 |

SOURCE: Members' survey.

TABLE III.3

COMMUNITY MEMBERS INDICATING THAT FRC CREDIT ENABLED THEM TO INCREASE PRODUCTION
(Estimated Percentage)

| TYPE OF PRODUCTION | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| Indexed Product | 26.4 | 0.0044 | 13.10 |
| Other agricul. product | 12.5 | 0.0097 | 6.10 |
| Other Livest. product | 11.3 | 0.0017 | 8.10 |

SOURCE: Members' survey.

the members had to obtain the resources for repayment from the proceeds of the levels of production that were in existence prior to the FRC credit. This may have caused them a hardship.

Loan Size

The amount of credit the members received was perceived to be very small. As reported in Table III.4, an estimated 81.1 percent of the population considered the loan too small. The program had originally planned to lend enough to each community to provide about $ 50 of credit per family. However, by the time the funds were disbursed, inflation had eroded the real value considerably. At any rate, the size of the loan was considered inadequate. There is a question, however. if the loans had been larger and the member had not used the credit to increase production, would the members have had the resources to be able to repay the loan. This result could be expected in the case of community purpose loans, where there is little or no immediate payoff of the credit to the members that generates income which would provide resources to repay the loan. If, on the other hand, the larger amounts of credit would have gone into productive purposes then it is much more likely the resultant increase in income would provide the necessary income to repay the loans.

TABLE III.4

COMMUNITY MEMBERS PERCEPTION OF SIZE OF FRC LOAN
(Estimated Percentage)

| PERCEPTION OF LOAN SIZE | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| More than necessary | 3.0 | 0.0001 | 2.40 |
| Adequate | 8.0 | 0.0004 | 4.20 |
| Less than necessary | 81.1 | 0.0022 | 9.70 |

SOURCE: Members' survey.

## Sources of Credit

### Prior Credit Experience

An estimated 13.1 percent of the members had received credit from any source in the three years prior to the establishment of the FRC (see Table III.4.1). This figure suggests that about 87 percent of the members would not have recieved credit had it not been for the FRC. This estimate is corroborated by the fact that an estimated 21.3 percent of the members (see Table III.5) were receiving other credits simultaneously with their loan from FRC.

Members who did not have credit in the prior three years were asked for the reasons they did not get credit. As reported in Table III.6, the most important reason was that they did not have knowledge of credit sources (45.5 percent). The second most important reason that it was too much bother (27.5 percent), which suggests that the transactions or, perhaps, interest costs were too high for the size of the loan desired. Only an estimated 14.9 percent said they did not need credit.

These results strongly suggest that the program is providing a service of credit to members of many communities that were not being previously served by credit. It should be noted, however, that there was considerable variance between communities. Some communities in the sample were in regions that were served by the major institutional lenders, such as the Bolivian Agricultural Bank (BAB). In those communities

TABLE III.4.1

ESTIMATED PERCENTAGE OF COMMUNITY MEMBERS
RECEIVING CREDIT IN THREE YEARS PRIOR TO FRC LOAN

| ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|
| 13.10 | 0.0002 | 8.9 |

TABLE III.5

ESTIMATED PERCENTAGE OF COMMUNITY MEMBERS
RECEIVING CREDIT FROM OTHER SOURCES SIMULTANEOUSLY
WITH CREDIT FROM FRC

| ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|
| 21.30 | 0.0051 | 14.1 |

Source: Members survey.

TABLE III.6

THREE MOST IMPORTANT REASONS FOR NOT RECEIVING CREDIT FOR COMMUNITY MEMBERS REPORTING THAT THEY HAD NOT HAD CREDIT IN THE LAST THREE YEARS PRIOR TO FRC LOAN

| REASONS | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| Didn't need credit | 14.9 | 0.0320 | 11.10 |
| Tried, but turned down | 13.6 | 0.0018 | 8.40 |
| Fear of inability to rep | 15.9 | 0.0015 | 7.70 |
| Too much bother (high transactions costs) | 27.5 | 0.0046 | 13.30 |
| Had too much prior debt | 14.8 | 0.0034 | 11.50 |
| Terms of credit unfavorable. | 19.8 | 0.0019 | 8.70 |
| Lack of knowledge of sources | 45.5 | 0.0114 | 21.00 |

SOURCE: Members' survey.

where the members had access to the BAB loans, the FINCA program was considered to be superfluous and not very useful, because of members' access to much larger amounts of credit and at more favorable (more subsidized) interest rates.

Other Sources of Credit

The availability of other sources of credit in some communities is demonstrated in Table III.7. Members were asked to respond up to the three most important sources of credit in their region. FINCA was considered the most important with an estimated 55.0 percent response. BAB was second with 45.7 percent and friends and relatives third with 38.3 percent. Interestingly, intermediaries, long considered the monopolistic villian of campesino credit and marketing, only accounted for an estimated 3.9 percent.

Desire for Future Credit from FRC and Other Sources

Members were asked if they would like to have another loan from FRC and if they would like a loan from another source next year. The answers are not mutually exclusive. As shown in Table III.8, an estimated 53.4 percent responded that they wanted another FRC loan and 49.5 percent wanted a loan from other sources. The former figure can be used as an indicator of the overall degree of satisfaction with the program as a source of credit. It shows that only about one-half of the members want to continue with the program. This is consis-

TABLE III.7

COMMUNITY MEMBERS PERCEPTION OF THREE MOST IMPORTANT SOURCE OF CREDIT IN REGIONS WHERE COMMUNITIES ARE LOCATED
(Estimated Percentages)

| REASONS | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| Bolivian Agricultural Bank | 47.50 | 0.0084 | 18.00 |
| Credit Unions Coop. | 6.30 | 0.0002 | 3.10 |
| Intermediares, rescadores, commerciantes | 3.90 | 0.0001 | 2.30 |
| Shopkeepers | 1.40 | 0.0005 | 1.10 |
| Money Lenders | 27.50 | 0.0056 | 14.80 |
| Friends and relatives | 38.30 | 0.0070 | 16.40 |
| FINCA | 55.00 | 0.0115 | 21.10 |

SOURCE: Members' survey.

TABLE III.8

COMMUNITY MEMBERS THAT WOULD LIKE A LOAN
FROM FRC AND OTHER SOURCES NEXT YEAR
(Estimated Percentages)

| REASONS | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| FRC | 53.4 | 0.0089 | 18.50 |
| Other Sources | 49.5 | 0.0072 | 16.60 |

SOURCE: Members' survey.

TABLE III.9

COMMUNITY MEMBERS PERCEPTION OF THE EFFECTS OF FRC COMPARED TO THE SITUATION PRIOR TO FRC
(Estimated Percentages)

| | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| EFFECT ON THE FUTURE OF THE COMMUNITY | | | |
| More optimistic | 26.70 | 0.0050 | 14.00 |
| No chnage | 52.20 | 0.0031 | 11.00 |
| Less optimistic | 20.30 | 0.0027 | 10.20 |
| EFFECT ON POSSIBILITIES OF UNDERTAKING COMMUNITY PROJECTS | | | |
| More optimistic | 27.10 | 0.0046 | 13.40 |
| No chnage | 52.50 | 0.0039 | 12.30 |
| Less optimistic | 21.50 | 0.0032 | 11.10 |
| EFFECT ON WELFARE OF COMMUNITY MEMBERS | | | |
| More optimistic | 28.00 | 0.0070 | 16.40 |
| No chnage | 50.50 | 0.0051 | 14.10 |
| Less optimistic | 20.90 | 0.0035 | 11.60 |
| EFFECT OF INCREASING OUTPUT OF INDIVIDUAL MEMBERS | | | |
| More optimistic | 29.10 | 0.0056 | 14.70 |
| No chnage | 48.90 | 0.0053 | 14.40 |
| Less optimistic | 21.50 | 0.0042 | 12.80 |

SOURCE: Members' survey.

tent with the members overall evaluation of the program as reported in the following sections.

Members Perception of the Program

After having had one year experience with the program, members were asked to give their perception of the program's impact on the community in the future compared to times prior to the program, based on several but important criteria: (a) the effect of FRC on the future of the community, (b) the effect of FRC on the possibilities of creating community projects, (c) the effect of FRC on increasing production of the individual community members, and (d) the effect of FRC on the general welfare of community members. The results are presented in Table III.9. The responses to each of the four questions are similar. Only about one-fourth of the members are more optimistic as a result of the FRC, about one half envision no future change as a result of the FRC, and about one-fourth are less optimistic.

These results strongly suggest that the program has not made much of an impact among the large majority of community members during its first year. They are consistent with the more detailed observations presented above.

## Conclusions

The FINCA program has been successful in reaching a large number of communities and families. It has provided the members with an access to credit, albiet in small amounts, that

most of them did not have previously. The communities mostly decided to use the credit for individual loans. The individuals, upon receiving their loans, did not tend to use the credit for increasing production, but rather more for consumption goods. Therefore, the program did not have much of a direct impact on production nor in raising members incomes.

After one year of experience with the program a large majority of the members were not optimistic about the benefits of the program, neither for themselves nor for the community. Only about one-half wanted another loan from the FRC. These perceptions of the program by the members are strongly suggestive that the program as not been successful in meeting the needs of the members and the communities, although it was successful in distributing credit to many communities and their members. Perhaps, these results may be attributable to the lack of experience with the program. Certainly, it can be anticipated that a program designed to rapidly disburse credit to a large number of families can not be expected to have time and resources to work with and educate the communities and its members. Nor can it be expected to be highly selective and work only with those communities that might truely benefit from its services. In our view, there are problems with the program. Moreover, as will be pointed out in the following chapters, there are inherant problems in the program's design that would contribute to the above results and the members' perception of the program as a credit instrument. If the design features can be corrected then the program would be able

to make a greater and more positive impact on the communities and families served.

## IV. CAPITALIZATION, INDEXATION AND DELINQUENCY

### Program Design for Capitalization

The program is designed for capitalization to occur at two levels. First, FINCA capitalizes its Revolving Credit Fund by obtaining donations and grants that are in excess of what is required to cover its operations costs. Second, the community FRCs are supposed to be capitalized when the community makes amortization payments to FINCA on the loan obtained from the Revolving Credit Fund. The latter deserves a brief explanation. When community members obtain a loan from the FRC the amount of the loan (measured in the units of the indexed product) plus an amount to be used by the community for paying an amortization to FINCA. The amortization proportion is equivalent to one-forth of the amount the member pays to FRC. As the community repays FINCA the community's debt to FINCA declines and, in this manner, the FRC is capitalized in an equal amount.

The product indexation feature of the loan is designed to more-or-less maintain the original real values of both the FINCA Revolving Credit Fund and the FRCs. This occurs in both cases because the amount that is lent is based upon the price of the indexed product ant the amounts that are repaid are likewise adjusted for any changes in the prices. Assuming that the movements in the prices of the indexed products parallel those of the inflation rate and there is no default, then both of the funds should maintain the same real values over time.

Growth and expansion of the program is provided for in three ways. First, a net increase in the FINCA Revolving Credit Fund--through donations and grants-- will allow FINCA to reach out to more communities or increase the loans to communities already served. Second, as the communities amortize their loans from the Revolving Credit Fund, FINCA can recycle these funds to make more loans. Third, the individual community can expand the size of its FRC by obtaining another loan from FINCA after they have completely repaid the prior loan. Thus, according to the basic program, a community would repay its loan after four years and would then be elegible to receive another loan of a similar amount (in real terms) which would double the size of the FRC.

## Critique of Design

The program has some admirable qualities. The most salient is the feature of product indexation to protect the real values of FINCA's Revolving Credit Fund and the FRCs in times of inflation. Yet, when the credit program is judged against the criterion of a viable self-sustaining financial institution, the capitalization features appear to have some serious defects. These are presented in the following two section on the Revolving Credit Fund and the FRC.

FINCA Revolving Credit Fund

This fund is entirely dependent on external funding as a source of establishing and increasing its capitalization. There is no provision for capitalization within the system. For example, there is no real interest rate paid to FINCA by the communities that will raise the real value of the fund. Moreover, it is almost certain that even under the best circumstances, the Fund will experience some losses due to default on loans. Therefore, external funding will be needed to maintain the Fund's real value. It is clear that FINCA will be continually dependent upon external funding to either maintain or increase the size of the Revolving Credit Fund.

There are other reasons to expect decapitalization of the Revolving Credit Fund. First, although the product-indexation system is designed to protect the fund against the effects of inflation, it is possible that the rate of inflation will be higher than the rate of increase in the price of the indexed product over the period of the loan. If this is the case, then decapitalization of the Fund will occur.

Second, the manner in which FINCA markets its ammortization payments is subject to a loss in real value. For example, if the product received by FINCA from the communities is low quality its price will be low. Moreover, FINCA employs the proceedure of substracting the marketing costs from the FINCA amortization. This directly leads to a slight decapitalization. Finally, because the regional supervisor is given independent control over the marketing of this product, there is

room for irregularities that will lead to decapitalization. Such irregularities might include the supervisor selling the product at a higher price than he reports and pocketing the difference.

Third, there is the possibility of an incrusion of operating costs in the FINCA Fund, if FINCA is not succesful in obtaining sufficient donations to cover these costs. This, of course, would directly lead to decapitalization.

FRC's

The only motive the community will have to maintain an FRC through capitalization, is if the community--a collective group of its individual members--envisions that the FRC is in its best interests. Essentially, this is a cost-benefit calculation that has to be undertaken by every member and then collectivized to the community level. In this context, the member's benefits are those derived directly from access to credit, or indirectly, to them from communal projects. From the member's perspective the costs are the implicit interest costs in borrowing, transaction costs in borrowing and repaying the loans, the opportunity costs of having placed money in the FRC and the risk cost of having a credit committee manage the fund.

Whatever the initial perception of the cost-benefit ratio, it would be expected that most communities would be willing to sign up to participate in the program and receive the loan from FINCA, because it offers them an easy access to

credit. Some communities, from the beginning, may envision strong balance of benefits and procede with enthusiasm. Others may envision a negative balance, but still agree to participate in the program in order to have access to the first year of credit. At the end of the year, if their negative expectations are realized they will either pay FINCA the entire loan and withdraw from the program or they will decide not to repay the loan, and, thus, effectively terminate the program. It would be expected that most communities will be undecided about the cost/benefit balance at the outset, but will agree to participate in the program and experiment to see how things turn out before deciding to continue or withdraw.

There are number of factors that would suggest that after experimenting with the program that many communities will not find the FRC desirable.

1. The size of the loan per member is very small compared to the costs, hence, members will not see this as a preferred source of credit. This will be especially the case if there are other sources of credit available to the community members.
2. The difficulties that members of a community will likely have in working together in a harmonious manner over several years with respect to: a) the desicions about whether to have communal or individual loans, b) responsibilities for joint liability in amortization and capitalization requirements, and

c) the management of the fund, including marketing of products.

3. The loans are of equal size, but the credit needs of different members can be expected to vary considerably. Therefore, there may be disagreement about the size of the loans and distributions of FRC funds among members.
4. The problems that members will have in meeting repayment and capitalization requirements in times when member incomes are low, such as in a year of a bad harvest.
5. The lack of a direct return to a member for having placed his money to capitalize the FRC. Under these circumstances, the member might well prefer save in another form where he can get a positive rate of return on his investment. Liquidity may also be a factor. The member may prefer to have his capital in an investment which has characteristics providing him quicker access to liquidity.

If the community is not convinced that it is to his advantage to participate in the FRC then, at best, he will repay the amount due to amortize the loan (at worst he wont even do that) but not capitalize the FRC. Under these circumstances the FRC will not be capitalized.

Summary

The capitalization process appears to be very fragile and uncertain. There are built in the program design and lack of incentives to make the program function as designed. While it is almost certain that large members of communities will be willing to sign up for the program if they are offered easy credit, it is much less likely that many of the communities will perform according to the plan, i.e. capitalize the FRC and continue in the program after the first year. Indeed, because of the lack of incentives, after each succeeding year more attrition can be expected. Therefore, the program can expect problems in succesfully establishing (capitalizing) FRCs over the long run at the community level.

These are also obvious reasons as to why the FINCA Revolving Credit Fund will experience decapitalization and be pressed continually to obtain additional external funding to maintain its fund. These reasons are delinquency (resulting from the member behavior), problems with the indexation mechanism, problems in the marketing process, and possible incrusion of the Fund by administrative costs.

Loan Repayment and Delinquency

FINCA faces a serious delinquency problem. As shown in Table IV.1, 58.6 percent of the communities that had loans, with maturity dates prior July 1, 1985, were in arrears. Most of these had not made any payment to FINCA. Note it was dif-

TABLE IV.1
FINCA's DELINQUENT LOANS AS A PERCENTAGE OF LOANS FOR WHICH
PAYMENT WAS DUE AS OF JUNE 30, 1985
(Loan Measured by Units of Products Lent)

| | REPAYMENT SCHEDULED THROUGH JUNE 30, 1985 | | I N A R R E A R S | | PERCENT DELINQUENT | |
|---|---|---|---|---|---|---|
| Product | No. of Commun. | Units of Product Programmed for Repayment | No. of Commun. | Units of Product | No. of Commun. | Units of Product |
| Potatoes | 189 | 5,840.1 qq. | 124 | 3982.9 qq. | 65.6 | 68.2 |
| Corn | 11 | 245.7 qq. | 9 | 200.2 qq. | 81.5 | 81.8 |
| Barley | 1 | 37.5 qq. | 1 | 37.5 qq. | 100 | 100 |
| Wheat | 4 | 49.8 qq. | 4 | 49.8 qq. | 100 | 100 |
| Quinoa | 4 | 31.6 qq. | 4 | 31.6 qq. | 100 | 100 |
| Horse beans | 3 | 77.8 qq. | 0 | 0 | 0 | 0 |
| Sweet potatoes | 2 | 55.0 qq. | 0 | 0 | 0 | 0 |
| Onions | 14 | 259.1 qq. | 1 | 72 qq. | 7.7 | 27.9 |
| Carrots | 3 | 157.5 qq. | 0 | 0 | 0 | 0 |
| Lemons | 1 | 26.4 qq. | 0 | 0 | 0 | 0 |
| Oranges | 1 | 7,500.0 unit | 1 | 7500 unit | 100 | 100 |
| Pears | 9 | 119,200.0 unit | 0 | 0 | 0 | 0 |
| Apples | 2 | 8,925.0 unit | 2 | 8925 unit | 100 | 100 |
| Peanuts | 1 | 11.0 qq. | 1 | 11 qq. | 100 | 100 |
| Sheep | 5 | 104.0 Head | 3 | 69 Head | 60 | 66.3 |
| Wool | 6 | 458.0 Pound | 0 | 0 | 0 | 0 |
| | 256 | | 150 | | 58.6 | |

SOURCE: Authors' Calculation based on FINCA records

ficult to estimate the total value of the portafolio in arrears dur to the fact that the value of the loan is based on fluctuating prices of the indexed product. Therefore, the data are measured in terms of units of product lent. This table shows the degree of delinquency by indexed product. For example, of the 189 loans which had potatoes as the indexed product and had payments due by June 30, 1985, or before, 124 communities (65.6 percent) had not amortized their loan on schedule as of July 30, 1985. The list goes on, 81.5 percent of the eleven communities with loans indexed to corn and 100 percent of the thirteen community loans indexed to barley, wheat, quinoa, oranges, apples and peanuts were in arrears. The twenty-three loans made with indexed products of horse beans, pears, carrots, lemons, sweet potatoes and wool were up to date. The delinquency rates by region are shown in Table IV.2.

Aging. Table IV.3 presents an aging distribution of the loans by indexed product. Of the total of 168 delinquent loans, 56.0 percent were past due by up to 30 days. This might suggest that loan repayment could be expected in the near future. The past record, however, does not show this to be the case. Of the loans with maturity dates beginning as early as January, when the first loans matured, the only communities that repaid were those few that repaid on time or in advance.

TABLE IV.2

FINCAS's DELINQUENT LOANS AS A PERCENTAGE OF LOANS FOR WHICH PAYMENT WAS DUE AS OF JUNE 30, 1985 FOR THE SIX REGIONS
(Loans Measures by Units of Product Lent)

| | LA PAZ-ORURO | | NORTH. LA PAZ | | NORTH. POTOSI | | SOUTH. POTOSI | | CHUQUIS-TARIJA | | COCHABAMBA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCT | No. Cons | Units | No. Cons | Units | No. Cons | Units | No. Cons | Units | No. Cons | Units | No. Cons | Units |
| Potatoes | 90.6 | 82.2 | 38.9 | 42.1 | 66.7 | 70.8 | 81.5 | 75.4 | 68.9 | 63.6 | 60 | 54.4 |
| Corn | | | 100.0 | 100 | 100 | 100 | 33.3 | 33.1 | 100 | 100 | 100 | 100 |
| Barley | | | | | | | | | 100 | 100 | | |
| Wheat | | | | | 100 | 100 | | | | | | |
| Quinoa | 100 | 100 | | | | | 0 | 0 | | | | |
| Horse beans | | | 0.0 | 0 | | | | | | | | |
| Sweet potatoes | | | | | | | | | | | | |
| Onions | 7.7 | 27.9 | | | | | | | 0 | 0 | | |
| Carrots | 0 | 0 | | | | | 100 | 100 | | | | |
| Lemons | | | 0 | 0 | | | | | | | | |
| Pears | 0 | 0 | | | | | | | | | | |
| Apples | 100 | 100 | | | | | | | | | | |
| Peanuts | | | | | | | | | | | | |
| Sheep | 100 | 100 | 50 | 60.7 | | | | | 100 | 100 | | |
| Wool | | | | | | | 0 | 0 | | | | |

SOURCE: Authors' Calculation based on FINCA records

TABLE IV.3

AGING OF FINCA'S DELINQUENT PORTFOLIO

| DAYS PAST DUE | NUMBER OF COMMUNITIES | PERCENT OF TOTAL |
|---|---|---|
| 30 | 84 | 56.0 |
| 31-60 | 42 | 28.0 |
| 61-90 | 21 | 14.0 |
| 91 or more | 3 | 2.0 |
| | 150 | 100.0 |

SOURCE: Authors' calculation based on FINCA records

Advance Payment. Much promotion has been made by FINCA about the communities that are paying in advance of the loan amortization date. As shown in Table IV.4, of those communities that made amortization payments, 72.6 percent made their payments in advance. Of the total number making amortization payments, 52.8 percent repaid their loans in full.

Implications for Capitalization. The major delinquency problem with FINCA's loans to the communities seriously threatens to significantly decapitalize the Revolving Credit Fund. The fact that a majority of communities have not repaid on schedule suggests that capitalization is not occuring at the community FRC level either. In these cases where the communities will undoubtedly leave the program since they probably did not capitalize their FRCs. Others, did capitalize and are using the full payment as a means to obtain another FINCA loan. The fact that many of the communities, who did repay early indicates that these communities saw it to their advantage to do so by lowering member interest costs.

Problems with Indexation System

The rates of change of prices of the most commonly indexed product, potatoes, were compared with the rate of inflation, as measured by the La Paz Consumer Price Index. The results are presented in Figure IV.1 and Table IV.5. Over the first year of the project, July 1984 through June 1985, the rate of increase in the CPI has been greater than the rise in

TABLE IV.4

AGING OF ADVANCE AMORTIZATIONS OF FINCA LOANS

| DAYS PAID IN ADVANCE OF DUE DATE | NUMBER OF COMMUNITIES | PERCENT |
|---|---|---|
| 0-30 | 51 | 66.2 |
| 31-60 | 13 | 16.9 |
| 61-90 | 8 | 10.4 |
| 91 or more | 5 | 6.5 |
| Total advance payments | 77 | 100.0 |
| Total amortizations | 106 | |
| Advance amortizations as percent of total | 72.6% | |

SOURCE: Authors' calculation based on FINCA records

# FIGURE IV.1

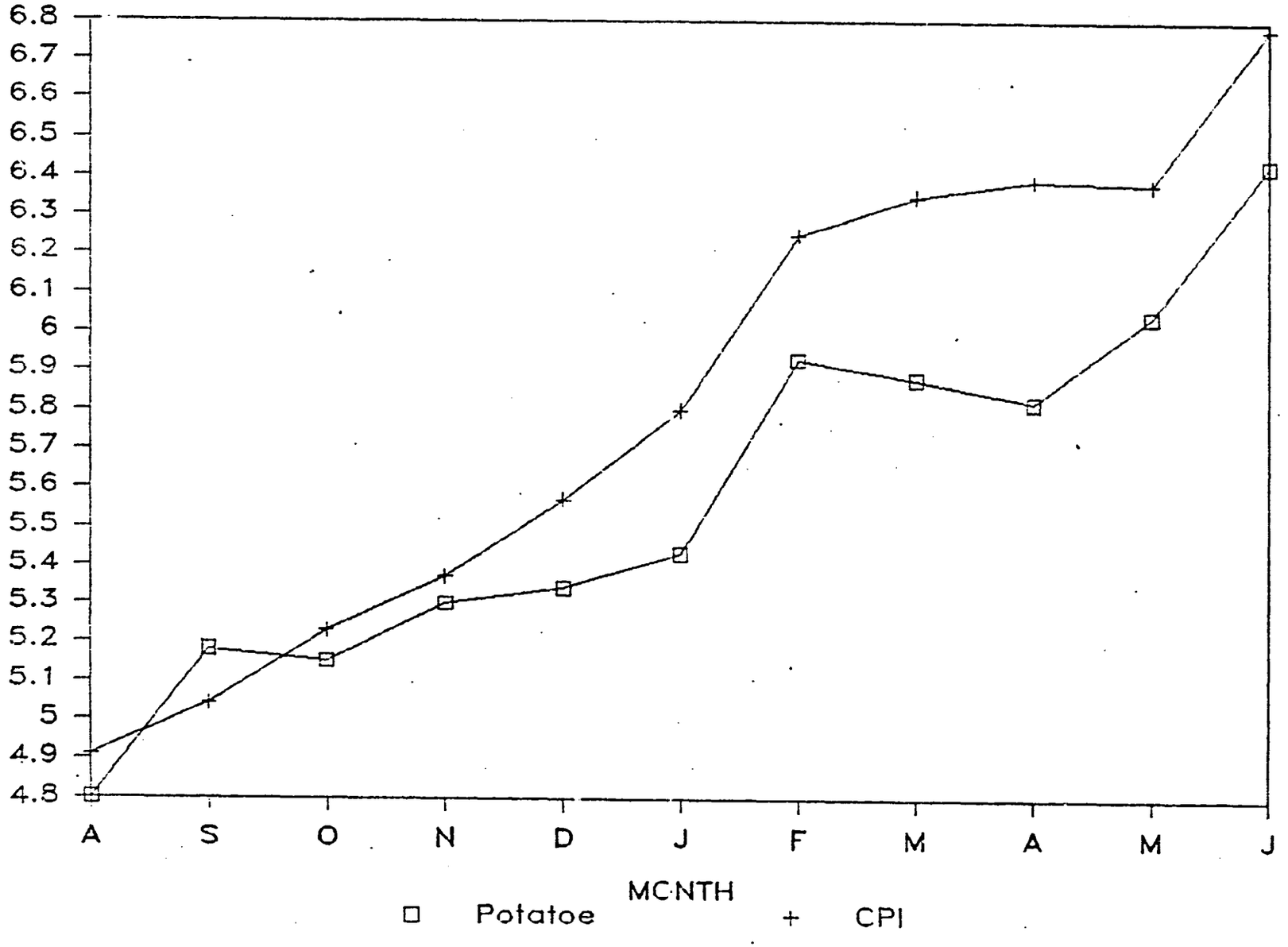
6.8
6.7
6.6
6.5
6.4
6.3
6.2
6.1
6
5.9
5.8
5.7
5.6
5.5
5.4
5.3
5.2
5.1
5
4.9
4.8
A
S
O
N
D
J
F
M
A
M
J
MONTH
Potatoe
CPI

TABLE IV.5
POTATOE AND LA PAZ CONSUMER PRICE INDEX
MONTHLY RATES OF CHANGES
August 1984 - June 1985

| MONTH | IPC | POTATOE PRICE |
|---|---|---|
| Aug.-Sept. | 37.32 | 112.50 |
| Sept.-Oct. | 53.71 | (7.80) |
| Oct.-Nov. | 63.34 | 42.50 |
| Nov.-Dec. | 60.88 | 7.96 |
| Dec.-Jan. | 68.76 | 23.50 |
| Jan.-Feb. | 182.88 | 202.52 |
| Feb.-Mar. | 24.94 | (10.13) |
| Mar.-April | 11.78 | (14.25) |
| Apri.-May | 3.51 | 67.37 |
| May.-Jun. | 133.90 | 144.67 |

SOURCE: Author's calculations based on INE and MACA records.

the price of potatoes. This implies decapitalization at both the FINCA Revolving Credit Fund and FRC levels, because the real value of both funds is not increasing at a rate to offset inflation.

These results say that, for this year the price indexation system did not compensate these funds for the full effects of inflation. There are reasons to believe, however that this year was somewhat a typical because of two reasons. First, there was abnormally high inflation. Second, because of the market conditions following the draught of 1983, the price of potatoes in mid 1984 was quite high. In contrast, by mid 1985, when there was a good harvest, the price of potatoes was quite low. Under more normal market conditions, the rise in the price of potatoes probably would have been higher.

There is, however, an inherant problem in program design. The amortization dates may have been set too early. It is common practice among farmers to hold many of their potatoes after harvest to sell them at a later date when prices are more favorable. This is readily done because of the favorable storage qualities of potatoes. Therefore, it would perhaps be better for the loan terms to be established such that the repayment date would be several months after harvest. In this manner, there would likely be less decapitalization due to the price indexation system.

Marketing Problems

An examination of the prices received by FINCA supp for the ammortized products and the going market pri potatoes in the regions sold(using data provided by suggests that there is a considerable discrepancy, the prices received by FINCA are lower that the market If this is the case, decapitalization of the FINCA Re Credit Fund is occuring. The discrepancies can be attri to two things. First, they can occur because of the sub tion of FINCA's marketing costs form the sales receipt ond, they can come about if the supervisor is dishon reports a price lower that he received. The first probl be corrected by placing the marketing costs under oper expenses. The second, is a matter related to the des the program for control of funds.

Incursion of Revolving Credit Fund by Administrative C

FINCA's records were examined. There is no evid incursion of operating costs in the Revolving Credit Fu

Community Member Attitudes Towards Indexation, Capitali and Repayment.

Indexation. As shown i.. Table IV.6, 50.1 percent of the nity members in the program stated they favored repayi FRC in the indexed product. This suggests that this f of the program has gained only partial acceptance.

TABLE IV.6

COMMUNITY MEMBERS ACCEPTANCE OF PAYING FRC LOAN IN KIND BY INDEXED PRODUCT

| ACCEPTANCE | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| Members Favoring paying in indexed product | 50.1 | 0.0146 | 23.70 |
| Members not in favor of paying in indexed product | 51.5 | 0.0140 | 23.20 |

SOURCE: Members' survey.

When questioned about their perception of the size of the ammortization payment, an estimated 53.8 percent thought it to be adecuate, and other 45.0 percent considered it excesive (see Table IV.7). The latter is indicative of the relatively high interest rate that members pay in this program relative to other institutional sources of credit (see Chapter V discussion on interest rates).

Understanding of FRC. Members were shown to have a basic understanding of how the community could increase the size of the FRC. As shown in Table IV.8, an estimated 77.2 percent correctly identified that the value of the FRC would increase were the community to obtain another loan, another 62.4 percent correctly stated that the FRC would increase if the price of the indexed product rose faster than inflation and 53.9 percent said the FRC would rise if the members would make contributions. As a check, members were asked if the FRC would increase if members did not repay loans, only 10.5 percent responded incorrectly to this question.

In a related question (Table IV.9) an estimated 69.8 percent of the population correctly identified the relationship between rising the price ofthe indexed product and the value of the FRC when asked what would happen to the FRC when the price fell an estimated 50.8 correctly identified the outcome.

The conclusion that can be drawn from the responses is that a solid majority of the members have a correct unders-

TABLE IV.7

COMMUNITY MEMBERS PERCEPTION OF SIZE
OF AMMORTIZATION PAYMENT

| RELATIONSHIP | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| Excessive | 45.0 | 0.0127 | 22.10 |
| Adequate | 53.8 | 0.0128 | 22.30 |
| Little | 1.2 | 0.0001 | 1.50 |

SOURCE: Members' survey.

TABLE IV.8

COMMUNITY MEMBERS UNDERSTANDING OF
HOW TO INCREASE SIZE OF FRC

| RELATIONSHIP | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| FRC get another loan | 77.2 | 0.0077 | 17.20 |
| Members Make contribution | 53.9 | 0.0101 | 19.70 |
| Price indexed product increases faster than inflation | 62.4 | 0.0073 | 16.80 |
| Members do't repay loans | 10.5 | 0.0047 | 13.40 |

SOURCE: Members' survey.

TABLE IV.9

COMMUNITY MEMBERS UNDERSTANDING OF RELATION
BETWEEN PRICE OF INDEXED PRODUCT AND
MONEY VALUE OF FRC

| RELATIONSHIP | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| If price of product rises the value of FRC rises | 69.8 | 0.0040 | 12.40 |
| If price of product falls the value of FRC falls | 50.8 | 0.0094 | 19.00 |

SOURCE: Members' survey.

tanding of the principal factors that directly cause the FRC to increase.

Voluntary Contributions to FRC. As shown in Table IV.10, only an estimated 33.5 percent of the members expressed a willingness to make voluntary contributions to FRC, even if the community decided to do so. This suggest that the members do not see it to their benefit to make voluntary contributions given the current structure of the FRC.

Delinquency and Repayment. It was hypothesized that repayment of the loan might cause a serious hardship on the member's family, and, thus, contribute to delinquency. This, however, does not appear to be the case for the majority. As shown in Table IV.11, an estimated 22.2 percent of the members responded that repayment was a serious hardship on the family and an estimated 55.7 percent said it was not. The conclusion is that while the size of the loan repayment was a hardship for about one-fifth or one-fourth of the population, it was not for the rest of the population. Therefore, it makes only a relatively minor contribution to delinquency.

The program does not directly address the question of the joint liability of the members for loan repayment. However, this concept is implict, because if some members don't repay their loans form the FRC then the FRC would not be capitalized nor would FINCA's loan be amortized at the programmed levels. Therefore, the question was asked to the members if

TABLE IV.10

WILLINGNESS OF COMMUNITY MEMBERS TO MAKE PERSONAL CONTRIBUTIONS TO FRC IF COMMUNITY DECIDED TO DO SO: PERCENT RESPONDING YES

| ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|
| 33.50 | 0.0111 | 20.7 |

SOURCE: Members' survey.

TABLE IV.11

COMMUNITY MEMBERS PERCEPTION OF ABILITY
TO REPAY FRC WITHOUT CAUSING PROBLEMS
FOR THE FAMILY

| CAUSED PROBLEMS | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 90% CONFIDENCE LEVEL |
|---|---|---|---|
| NO | 57.7 | 0.0099 | 19.50 |
| YES | 22.2 | 0.0072 | 16.70 |

SOURCE: Members' survey.

TABLE IV.12

WILLINGNESS OF COMMUNITY MEMBERS TO
HELP PAY FRC FOR OTHER MEMBERS
DELINQUENCY: PERCENT RESPONDING "YES"

| ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|
| 46.10 | 0.0077 | 17.1 |

SOURCE: Members' survey.

they would accept the responsibility for making repayments for a member who was delinquent. An estimated 46.1 percent responded that they would do so. This suggests that the concept of joint liability is only midly accepted among the membership. Furthermore, this was only a hypothetical situation. If it had actually occurred, the willingness to cover for other members might well have been less.

## Conclusions

The current design of the program has important flaws that seriously threaten the capitalization of the program at both the level of FINCA and the FRCs. At the level of FINCA the reasons are three fold: a) there is no provision for interest earnings on its loans to the FRCs that would allow FINCA to cover the expected losses due to delinquency and default, as well as operations expenses and have some left over to capitalize the Revolving Credit Fund; b) there are losses form the repayment reflows due to the structure of the marketing system of the FINCA amortization payments; and c) there are possible losses due to the relative increases of prices of indexed products and inflation. If FINCA is continually decapitalized, it will need to continue to depend upon outside sources of funding--grants and donations--to be able to maintain its existing level of activity.

At the level of the FRCs, the program design does not provide appropiate incentives to want to cause the members to capitalize the FRC. The only incentive is to maintain access

to future credit and eventually (programmed over a four-year period) to increase the size of credit by increasing the size of the FRC through additional loans from FINCA. This incentive does not appear to be sufficient for many members. The result is that the FRCs are not capitalized even though the community's loans to FINCA are repaid.

A symptom of this problem is the measured high delinquency rate. Although, it is possible that more communities will repay as time passes there are serious doubts about this willingness to genuinely capitalize the FRCs. If this does not occur, the central thrust of the program's concept, the establishment of the FRCs, is destroyed.

## Recomendations

The program should be restructured along the following lines:

1. Maintain the product indexation system, but recognize that even with the indexation some decapitalization will occur due to different rates of changes of the price of indexed products and inflation. It is possible that by extending the term of the loan to a time when the price of the indexed product is higher--say several months after harvest-- that losses due to decapitalization on this account can be reduced.
2. Have FINCA make explicit interest charges on its loans to the FRCs that are of sufficient size to cover expected losses from delinquency and operations expenses.

3. Create a financial incentive within the FRC to cause members to want to capitalize. The most direct way would be to offer interest payments or dividends to the member.
4. Establish a more efficient and better controled system on the supervisors' marketing of the FINCA ammortization. The most direct way would be for the committee to repay FINCA in cash--at the market value equivalent of the price of the indexed product-- which could be receipted and, therefore, must match with a bank deposit. This would also reduce FINCA's costs by eliminating the supervisor's time and expense in marketing the product.
5. Concentrate on loan repayment. FINCA apparently treats repayment a very "flexible" manner. This is an incorrect approach for any credit program and has serious potential consequences for capitalization at both the FINCA and the FRC level.
6. Carefully screen all communities and discontinue the credit program in these communities that do not have the characteristics appropiate to the program.
7. Make FINCA a financially self-sufficient organization that will not need to rely on outside grants, donations and subsidies to maintain its level of activity.

# V. THE FINCA CREDIT DELIVERY SYSTEM

## Introduction

A credit delivery system (CDS) consists of all the activities, proceedures and requirements, including loan conditions,terms and interest charges, that the lender and the borrower must undertake in the process of making or obtaining a loan, implementing it and collecting or repaying it. The CDS thus involves, for the borrower and lender, the transactions costs of time, documents and materials in undertaking the delivery of credit. For the borrower it also involves the financial cost of borrowing. i.e., interest charges. Although, both the lender and borrower are participants in the CDS, their respective transactions costs are likely to be quite different. Thus, it, is important to study the CDS from the aspect of both the lender and the borrower.

This chapter analyzes the CDS from both FINCA's and the community/member's perspectives. The principal criterion in the evaluation is the cost and efficiency of the CDS for delivering a final product, a financially viable credit system. Attempts are made to analyze how the system will influence lender and borrower behavior. The chapter is organized as follows. The first section deals with interest rates. The second examines the FINCA CDS from the aspect of the lender and the borrower. Both of these sections have subsections that describe the design of the program. These are followed by subsections that identify strengths and weaknesses of the

design. Each subsection finishes with empirical evidence of these strengths and weaknesses. The chapter concludes with a series of recomendations of how to improve the CDS.

## Interest Rates in the Design of the Program

The program is publicized and promoted as not charging interest rates to the community. At the community level, when the members repay their loans the amount they repay is considered as going to replenish the FRC in the amount of the original loan plus an amount to amortize the community's loan to FINCA, or, alternatively, to capitalize the FRC. Interest rates are not mentioned.

## Critique of the Interest Rate

Nothwithstanding what is said about the program by FINCA, there are implicit nominal and real interest rates charged to the communities by FINCA. In practice, the burden of paying the interest charges is passed on to the members by the community.

At the community level the nominal rate of interest should be considered as follows. The community receives a loan that is the equivalent of a fixed number of units of the indexed product multiplied by the current price of that product. For example, if the community had 50 members and the indexed product was two quintales of potatoes for which the price was $b. 30,000 per quintal, then the community would receive a credit of $b. 3,000,000. The community will need to

repay the loan over a four-year period. The annual nominal rate of interest, r, is conceptually calculated by discounting the value of future payments. $A_t$, made by the community to FINCA to obtain the present value of the initial loan, $A_o$.

$$A_o = \sum_{t=1}^{4} \frac{A_t}{(1+r)^t}$$

The burden of paying the interest, however, is transfered to by the community to its members. When the members obtain a loan from the FRC a member receives an amount of money determined by multiplying the member's units of the indexed product by their current price. When the loan is repaid the member must replenish the FRC in the full amount of the indexed product borrowed, plus provide an additional one-fourth of this amount to be used to amortize the loan to FINCA,both of which are converted to money terms by the price received in the sale of the indexed product. To calculate the annual nominal rate of interest that the member must pay for the use of the money he recived from the FRC the following formula is used:

$$r = \frac{36{,}500\ (A_t - A_o)}{A_o\ n}$$

Where, $A_o = XP_o$ is the monetary value of the loan at the

time the loan is made, where X is the units of the indexed products borrowed, and $P_o$ is the price per unit of this product at the time the loan is made.

$A_t = XP_t(1 + y)$ is the monetary value of the loan at the time the loan is repaid, where X is the same number units of the indexed product that are repaid as were lent, $P_t$ is the price per unit of this product at the time the loan is repaid, and y is the portion of X that is paid for amortization.

n is the number of days the member had the loan.

36,500 refers to multiplication of 100 (to convert to percent) by the 365 days in the year.

It is clear from the formula that changes in any one of three variables will make r larger: (a) the greater y, (b) the lesser n, or (c) the more $P_t$ exceeds $P_o$. Of course there are many permutations of these variables that would need to be considered on an individual basis. Stated another way, the implicit annual nominal interest rate, r, that the member paid will tend to rise if either of the following two things occur: (a) if the proportion of the loan required for amortization rises, or (b) if the price of the indexed product at the time of sale is greater than at the time of the loan, or, the shorter the time the money is outstanding as a loan. No-

te, however, that although the interest rate will be higher the shorter the time, n, the interest paid will be less.

To calculate the real rate of interest, r, nothing more is required than to adjust the nominal rate, r, for the rate of inflation, p, that occured over the period, n, of the loan. This is accomplished using the following formula:

$$r = \frac{r - p}{1 + p}$$

If the real rate is negative it implies decapitalization of both the FINCA Revolving Credit Fund and the FRCS.

## Calculations of Interest Rates and Interpretation of Their Impact on Borrower Behavior

### Interest Rates

The annual rate of interest paid by a community member for a loan will depend upon the magnitudes of the above variables. Because of the differences in the magnitudes among communities, the rates of interest between communities will vary. FINCA data are used to calculate the annual rates for the loans that have been amortized; the results for the country and the six regions are presented in Table V.1. For the country, the nominal annual interest rate ranged from a low of 561.5 percent to a high of 9,485.2 percent. The mean rate was 2,720.3 percent. Given the standard deviation, we know that 67 percent of the rates fell between 954.5 and 4,486.1

TABLE V.1

IMPLICIT NOMINAL AND REAL INTEREST RATES PAID BY COMMUNITY MEMBERS ON LOANS FROM FRCs BY REGIONS AND COUNTRY: ASSUMING CAPITALIZATION

| REGIONS | NOMINAL INTEREST RATE | | | | REAL** INTEREST RATE |
|---|---|---|---|---|---|
| | MINIMUM | MAXIMUN | MEAN | STANDARD DEVIATION | |
| Whole Country | 561.5 | 9,485.2 | 2,720.3 | 1,765.8 | -67.52 |
| Cochabamba | 992.6 | 6,698.5 | 3,493.4 | 2,050.4 | -75.25 |
| Chuquis-Tarija | 561.5 | 5,009.8 | 2,517.6 | 1,532.8 | -69.03 |
| Northeran La Paz | 997.5 | 9,485.2 | 3,125.7 | 1,925.0 | -62.85 |
| Northern Potosi | 2,630.0 | 5,804.9 | 4,408.0 | 1,425.4 | -48.08 |
| Southern La Paz | 679.0 | 4,664.7 | 1,540.4 | 960.1 | -81.11 |
| Southern Potosi | 1,427.6 | 3,367.9 | 2,258.5 | 630.1 | -72.84 |

SOURCE: Authors' calculation based on FINCA records

percent. When the nominal rate was adjusted for inflation the mean real annual interest rate was -67.52 percent. Similar results were obtained compared to credit for the six regions. Analysis of the individual communities showed that all communities, except one, paid a negative real rate of interest.

Implications for Borrower Behavior

Negative real rate. The negative real rate has two important implications. First, it means that the prices received for the indexed products sold are not sufficiently high to keep up with the rate of inflation in the country. Therefore, the real value of both the FRCs and the FINCA Revolving Credit Fund declined in that year, thus threatening the financial viability of the program. Second, it means that the member borrowers obtained a real net transfer of resources, equivalent to the negative rate times the amount borrowed. This condition alone should encourage members to borrow, if they had expectations that the rate of inflation would have been as high as actually occured.

Comparisons with Interest Rates From other Sources of Credit. What is probably more important, however, is how the members perceive the program's rate of interest in comparison to other sources of credit. In this regard, the rates of the program are high compared to rates from other financial institutions.

For example, for the agricultural year 1984 - 1985, annual nominal interest rates for important sources of agricult-

ural financing were: 84 percent for loans from the Bolivian Agricultural Bank, 97.2 percent for loans from Central Bank refiricing loans for small farmers, and 118 percent for loans from Central Bank refinancing lines for large farmers. Since March 25,1985, there were important changes; loans from the Agricultural Bank were raised to 972 percent and loans from Central Bank refinancing lines were fixed at 1,650.9 percent. It is clear that the interest rates from these institutions are considerably lower than the FINCA program rates.* If community members were to have access to these credit sources they would consider the FINCA program inferior. Indeed, this was what was observed in the field study.

Early amortization. As shown in Table IV, 4, for those communities that made ammortization payments on their loans, 72.6 percent paid prior to the schduled amortization date, many a considerable time in advance. From the perspective of the interest charges, it is to the borrower's advantage to do this, a factor which has undoubtely contributed to this observed behavior. This is due to the rise in the prices of the

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(*)NOTE, The authors are not arguing for lower interest rates on FINCA loans. It is their view that attemps should be made to have borrowers pay positive real rates of interest. Otherwise, financial markets do not function efficiently.

indexed products. If the member anticipates that the price of the product will continue to rise, he will view it to his advantage to pay in advance. There also would be the benefit the member foresaw that he would need to sell other products or buy indexed products in the market to be able to liquidate his debt.

Full Amortization

There is another aspect of interest rates that may help explain observed borrower behavior. As shown in Table V.2, a large portion of the communities, 52.8 percent, that made amortization payments to FINCA in the first year of their loans, amortized the full amount of their loan. It is known that twenty (18.9 percent) of these communities did not replenish the capital to the FRC and withdrew from the program. It is strongly suspect that other communities that repaid in the full did not capitalize the FRC even though they obtained a second FINCA loan. From an interest perpective it is adventageous for the community to do this. As shown in Table V.3, when a community amortized its loan in full, but did not capitalize the FRC the mean annual nominal rate of interest paid was only about one-third of what was the rate had the community replenished the FRC. Likewise, the real rate was also considerably more favorable. This sort of behavior would be expected of a community that chose to withdraw

TABLE V.2

COMMUNITIES AMORTIZING INITIAL FINCA LOAN IN FULL,
RECEIVING SECOND LOAN AND FORMALLY WITHDRAWING FROM PROGRAM

July 31, 1985

| Regions | Number of communities amortizing loan in full | Number of communities obtaining follow on FINCA loan | Number of communities withdrawing from program |
|---|---|---|---|
| Cochabamba | 8.0 | 8.0 | 0.0 |
| Chuquis-Tarija | 12.0 | 10.0 | 2.0 |
| Northeran La Paz | 10.0 | 3.0 | 7.0 |
| Northern Potosi | 1.0 | 0.0 | 1.0 |
| Southern La Paz | 22.0 | 12.0 | 10.0 |
| Southern Potosi | 3.0 | 3.0 | 0.0 |
| Country Total | 56 | 36 | 20 |
| Percent of total loans amortized | 52.8 | 33.9 | 18.9 |

SOURCE: Authors' calculation based on FINCA records

TABLE V.3

IMPLICIT NOMINAL AND REAL INTEREST RATES PAID BY COMMUNITY MEMBERS ON LOANS FROM FRCs BY REGIONS AND COUNTRY: WITHOUT CAPITALIZATION

| REGIONS | NOMINAL INTEREST RATE | | | | REAL INTEREST RATE |
|---|---|---|---|---|---|
| | MINIMUM | MAXIMUN | MEAN | STANDARD DEVIATION | |
| Whole Country | 24.1 | 9,485.3 | 947.2 | 849.4 | -87.94 |
| Cochabamba | 34.2 | 3,280.9 | 1,472.6 | 1,217.4 | -81.89 |
| Chuquis-Tarija | 24.1 | 2,351.5 | 1,225.2 | 769.5 | -84.74 |
| Northeran La Paz | 95.0 | 4,682.6 | 1,012.2 | 1,006.1 | -87.19 |
| Northern Potosi | 705.1 | 1,058.2 | 987.4 | 279.4 | -87.48 |
| Southern La Paz | 31.9 | 2,260.2 | 570.9 | 491.3 | -92.27 |
| Southern Potosi | 95.7 | 1,599.5 | 518.4 | 564.3 | -92.88 |

SOURCE: Authors' calculation based on FINCA records

from the program or from one that wanted to obtain a second FINCA loan but without increasing the size of the FRC.

## Design of the FINCA Credit Delivery System: Structure, Terms and Proceedures

### Decentralizated Structure

The FINCA CDS is highly decentralized with each of the six regions operating independently under the broad guidelines specified by FINCA. Each regional supervisor has a separate bank account from which he is authorized to make expenditures, finance new loans and to deposit receipts from amortizations of communities in the region. The supervisor has the responsibility to prepare reports and statements of account to the Central Office where they are reviewed and consolidated.

### Terms of Loan

The terms of the FINCA loan to the community are straight forward and simple. The loan is made to the community for a period of four years with one year of grace if necessary (to account for a year of bad harvest). This is no guarantee, except the written promise of the community to repay. The community assumes the responsibility to amortize the amount lent to FINCA, measured in terms of the equivalent of the units of the indexed product lent, over the four-year period. The programmed rates of amortization are one-fourth of the total each year.

There are no restrictions placed by FINCA on the community about how the community uses the funds, except that the funds are to be used in an egalatarian manner, i.e., each community member gets a loan of equal size and is supposed to repay the principle on that loan to the FRC each year and also make an amortization payment to FINCA of one-fourth of the principle. The communities can decide whether to use the funds for purposes of loans to individual members, loans to members to finance community projects, or a combination of both. FINCA imposes no restrictions on the use of borrowed monies by the individual borrower.

The annual amortization dates are determined in advance by the community and FINCA at the time of the loan is made or later, when the community members have decided on the use of FINCA fund. Most typically, they are scheduled right after the harvest of the indexed product.

Principal Actors in the Credit Delivering System

There are three principal actors in the CDS: (a) The regional supervisor, (b) Field promotors, and (c) The community committes. The roles of the three as indicated in the 1984 Instructivo Administrativo are as follows:

Supervisors

1. To promote the establishment of FRC in rural communities in their regions.

2. To collect loan amortization payments from the communities. These are to be paid in kind (the indexed product) and, therefore, the supervisors make arrangements to: (a) consolidate all products, (b) contract for transportation, (c) collect and transport the products, (d) sell the products, and (e) deposit the proceeds in FINCA's bank account in the region.

3. To establish new FRCs with the monies deposited in FINCA's regional bank account from the amortization payments (specified in 2 above). A goal of establishing about 30 new FRCs per region per year is suggested.

4. To make follow-up visits to the communities. At least one visit should be made each year after the loan is disbursed and prior to the amortization to: (a) check on how the FRC is working, (b) review the paper work on community records for loans made to members and investments made in community projects, (c) establish a date for collecting the amortization products, and (d) study and resolve any problems, including those of repayments.

5. To make an annual evaluation (during or After the collection of products for amortized payments) on the use and results obtained by the community from the FRC.

6. To prepare reports and statements of accounts to include: (a) a register of disbursements and amort-

izations for each FRC, (b) a monthly statement of accounts, and (c) a monthly narrative report of activities.

7. To employ, train, supervise and pay field promotors.

Field Promoters

These persons are to reside in the regions served and are to come from a peasant farming background. The duties are:

1. To assist the pre-FRC promotion in the communities, by visiting the community several days prior to establishing the FRC, providing advance information to the community about the program, and encouraging members to attend the forthcoming assembly meeting with the supervisor.
2. To assist the supervisor in the activities of the meeting when the FRC is established.
3. To undertake follow-up visits to the communities to check up on the FRC progress, FRC paperwork, and to make sure that the indexed products for amortization are ready when they are to be picked up.
4. To assit the supervisor in his evaluation of the uses and results of the FRC.
5. To assist the supervisor in the pick up and sale of indexed products.
6. To prepare monthly reports of activities and statements of accounts.

7. To train and supervise the members of the community committees.

Community Committee

The community assembly will elect a three person committee to supervise the FRC. Their duties are:

1. President. The president will: a) lead the committee within the limits specified by assembly, b) hold committee meetings at least once each three months, c) co-sign all documents and receipts in the administration of the FRC, d) supervise the use of the FRC, visiting each member family at least once each year to remind them of their obligations, e) coordinate the picking up and selection of members indexed products used to repay the FRC and amortization, f) collaborate with FINCA personnel in the sale of the indexed products, and g) co-sign all documents.
2. Secretary. The secretary will: a) prepare the Loan Document (Acta de Compromiso) and make sure it is signed by each of the participating members, b) keep a FRC Register with one page for each family, c) prepare all other documents for the FRC, d) assist picking up and selection of members indexed products used to repay the FRC and amortization, d) co-sign all documents, and e) co laborate with the FINCA personnel in the sale of the products.

3. Treasurer. The treasurer will: a) count and certify the amount of money received in the loan, b) maintain in a safe place the resources of FRC, c) count and deliver the money lent to each family in the case of individual loans, d) make payments and obtain receipts for each purchase made with the FRC, e) collaborate in the picking up and relation of indexed products used to repay the FRC and amortization, f) co-sign all documents, and g) collaborate with FINCA personnel in the sale of the indexed products.

Proceedures and Practices

The proceedures followed by FINCA in the CDS are standard, straight forward and simple. To describe them it is useful to break down the CDS into four phases: (a) Pre-loan, (b) loan disbursement and implementation, (c) repayment, and (d) marketing.

Pre-loan Phase. This phase is designed to identify communities to participate in the program and to promote the program among these communities. In this stage, the promoters visit communities to present the program to them. If time permits, the promoter fills out a preliminar study of the community to determine its characteristics and suitability for participating in the FINCA program. Once a decision has been made to try to work with a community, the promotor asks the community

to call an assembly meeting at a date in order that the supervisor can come and explain the program.

Loan disbursement and implementation phase. At the prearrange time of the meeting of the assembly, the supervisor and promoter arrive at the community and make a presentation to the assembly about the concept of the FRC. Visual aids are used. After dicussing the program and answering questions, the FINCA personnel leave for about 45 minutes to allow the assembly time to discuss their participation in the program among themselves.

When the FINCA personnel return, and if the community has decided to participate, the supervisor goes through a specific routine. The first task is for the assembly to elect a community committee to oversee and manage the FRC. Second, the supervisor then places on a table the money to be lent to the community by FINCA (the amount depends upon the number of participating members and the price of the indexed product in the local regional market). Then a loan document between FINCA and the community (Acta de Compromiso) is prepared, following a format provided by FINCA and recorded in the community's official record book (Libro de Actas). Two carbon copies are prepared for FINCA files. The loan document states that the date of amortization is to be fixed by the community at a date following the harvest of the indexed product and the date is to be communicated to FINCA. The loan document is read outloud, after which all members present sign their name

or give a thumbprint. For those members not present, family or friends may sign for them. A receipt to FINCA for the money lent (Recibo del Dinero) is prepared and signed by the Community Committee. It is suggested that this be followed by a challa of the money (a peasant custom of blessing something). At this same meeting, or at a later date, the assembly must decide how they want to use the FRC. They will choose between loans for individual or communal purposes or a combination of both. There are no FINCA restrictions in this regard,except that the monies be distributed to the members equal amounts.

Between this time and repayment, the supervisor has to visit the community at least twice. During the first visit he has to check up on the FRC and made sure that the committee has established an adequate record keeping system including a separate record for each member. During the second visit he is to establish a date for repayment of the amortization to FINCA and to discuss the capitalization requirements.

The promoter visits the community with greater regularity. In his visits, he is to follow-up on the management of the FRC and, in general, to work with the community on matters related to the FRC. There are plans to give the promoters intensive training in order that they might provide a wider variety of technical assistance to the community on agricultural and livestock practices.

Repayment phase. In this phase, community committees are expected to arrange for members to bring their units of the

that the products are of good and uniform quality. On a pre-arranged date, the supervisor picks up the amortization portion and transports it to a market site for sale. The receipts from this sale,less any marketing costs he incurrs, are deposited in the FINCA bank account he manages.

Marketing phase. The community committee has the responsibility to market the portion of the indexed product placed in the FRC. This can be done in several ways, as per the community's wishes, including the possibility of storing the product for sale at a later date when more favorable prices are expected.

There is a potential problem in the management of the FRC between the periods of marketing and the new loan. The problem is how to manage the fund such that it does not lose its real value. For example, the agricultural production cycle is usually some 6 months. If the FRC is capitalized by the sale of the indexed product soon after the harvest and the next round of loans occurs at the time of planting for the next agricultural cycle, there is a period of some six months until the funds in the FRC are needed. In the meantime the funds should be earning a return. This means putting them into an investment that earns a good return. If inflation is present, the real value of the funds can be eroded. Therefore, the community has an incentive to roll over the funds over as rapidly as possible and make new loans. If this is

over as rapidly as possible and make new loans. If this is the case, it is possible that these loans will be out of synchronization with the production cycle.

Critique of Design of Credit Delivery System

The criteria used in this critique are those of cost efficiency and the contribution of the CDS to the success of the program. These two factors are not independent and there are obvious trade offs between them.

The CDS has a number of positive features. It is simple and designed to fit into a mode of operations that is familiar to peasant communities, such as using the assembly as a decision making unit and the Libro de Actas to record the official loan documents. Furthermore, the peasants are incorporated directly into the decision making process. The program appears to have low transactions costs for both FINCA and the community borrowers. In addition, the CDS lends itself to the rapid establishment of FRCs and disbusement of funds. The fact that FINCA does not tie the loans to the production of any product gets around the problems of fungibility associated with targeted loans. Finally, the product indexation feature makes big steps in avoiding the inflationary erosion of the real values the FRCs and the FINCA Revolving Credit Fund.

The CDS, however, appears to have some aspects that are problematical for the success of the program. The design for speedy establishment of FRCs and disbursement of funds undoubtedly leads to a less than full understanding of the pro-

gram by community members or, perhaps, even the community committee. With the rapid implementation, the members probably see the program as a new and easy source of credit, associated with some sort of community development fund. But it is very unlikely that they fully understand the implications for themselves nor that they have time to throughly understand the program in detail.

In the same context, there does not appear to be sufficient provision for FINCA personnel to work with the credit committee to educate them and develop their skills both as FRC managers and as educators of the community about the program. This lack of a attention to developing the community can cause serious negative consequences for capitalization and the long-run live of the FRC.

The CDS places a lot of responsibility in the hands of the community committee for fund management, marketing of members products for repayement to FRC, etc. It is questionable whether community members will place that much faith in the committee members to carry out these responsibilities. Peasants are very skeptical about such matters.

The egalatarian manner in which credit from the FRC is distributed among the members may be problematical. There is no reason to expect that each member will need the same amount of credit. Therefore, under the program design some may receive to little and be unsatisfied, while at the same time others may receive too much and have difficulties in making their repayments.

The structure of the system gives a great deal of responsibility to the supervisor, over whom there is limited control. There is no way in the short run to evaluate their work. Furthermore, as noted in the previous chapter, there is room for irregularties and dishonesty, particularly in the marketing phase.

Empirical Indicators of Success and Problems in Proceedures

Cost of Credit delivery by FINCA. Table V.4 presents information on FINCA's costs and cost efficiency ratios. Compared to the size of portfolio as of June 30, 1985, the costs for the program are high. Administrative costs, not including expenditures for RDS technical assistance are 75.7 percent of the total portfolio. When the RDS technical assistance is added the figure rises to 110.4 percent. If conservative estimates of the financial and risk costs are included it rises to 123.4 percent. These figures have been impacted by the effects of inflation on the portfolio. The administrative costs are pegged to the dollar since all salaries and per diem are calculated in dollar equivalents at the parrallel market rate, whereas the portfolio is in pesos. Therefore, in peso terms the costs are rising over time relative to the portfolio. Yet, since the portfolio measured in terms of current prices of indexed products the effects of inflation on the value of the portfolio should have been at least partially affset by index-

TABLE V.4

COSTS AND COST EFFICIENCY RATIOS OF FINCA PROGRAM FOR YEAR
July 1, 1984 - June 30, 1985
(in U.S. Dollars)

COSTS

| | | |
|---|---|---|
| I. Administrative Costs | | 92,790 |
| Salaries (local employees) | 55,230 | |
| Per Diem | 23,400 | |
| Other | 14,160 | |
| II. Foreign Technical Assistance | | 42,412 |
| III. Total Administrative Costs (I+II) | | 135,202 |
| IV. Opportunity costs of capital (8% annual) | | 9,801 |
| V. Rsik costs (5% portfolio) | | 6,125 |
| VI. Total cost (I+II+III+IV+V) | | 151,126 |
| Administrative costs as % of portfolio | | 75.7% |
| Administrative costs (I) per community served | | 214 |
| Administrative costs (I) per family served | | 4 |
| Total Administrative costs (III) as % of portfolio | | 110.0% |
| Total Administrative costs (III) per community served | | 312 |
| Total Administrative costs per family served | | 6 |
| Total costs (IV) as % of portfolio | | 1 |
| Total costs (IV) per community served | | 349 |
| Total costs (IV) per family served | | 6 |

SOURCE: Authors' calcutation based on FINCA records

ation. Regardless of these distortions it is clear that the program is very expensive to operate relative to the size.

Other measures of cost efficiency are the costs per community and per member served. These figures do not make the costs look so high, since they appear to be relatively low compared to many formal financial institutions. Yet, if they are put into the perspective of the average size of loan per community or per member they, too, are high. For example, if the average loan size is $10.00 and the costs per member are $ 6.2 then costs represent 62 percent of the loan.

The bulk of the costs are associated with the regional operations. For example, among salaries and per diem, the large bulk is due to regional activities. The program clearly does not suffer from an expensive Central Office. Indeed, it can be argued on the grounds for more control and better record keeping that the Central Office staff should be expanded.

Borrower Transaction Costs. Average estimated borrower transaction costs were measured from the data obtained in the survey. As shown in Table V.5, the average number of meetings attended by the member corresponded closely to what was programmed by FINCA. There was an average of about two meetings prior to disbursement, one meeting for the disbursement and 1.5 meetings for repayment.

All borrower transaction costs were in terms of the time spent. Members did not have any out-of-pocket costs since they travelled to the meetings by foot. The estimated time

TABLE V.5

ESTIMATED AVERAGE BORROWER TRANSACTION COSTS

| P H A S E | NUMBER OF MEETINGS | AVERAGE TOTAL TIME S/MEETING (HOURS) | AVERAGE TOTAL TRAVEL TIME (HOURS) | AVERAGE TOTAL TIME P/PHASE (HOURS) |
|---|---|---|---|---|
| APPLICATION | 1.96 | 3.71 | 2.73 | 6.43 |
| DISBURSEMENT | 1.00 | 1.90 | 1.39 | 3.29 |
| REPAYMENT** | 1.54 | 2.93 | 3.86 | 6.79 |
| TOTAL | 4.50 | 8.53 | | 16.51 |

**Includes time involved in transportation of the indexed product.

SOURCE: Members' survey.

spent per member over the life of the loan was 16.51 hours. Of this total, 8.53 hours (51.7 percent) was spent in meetings and 7.89 hours (48.3 percent) was spent in travel. The travel time for taking the members' indexed product to the FRC was almost half of all travel time. Members spent virtually no time in marketing the FRC product. There were no specific meetings held for this purpose.

The borrower transaction costs were low--the equivalent of about two works days. Compared to those of other credit institutions, such as the Agricultural Bank, they are very low. Yet, compared to those for credit from money lender they are somewhat high. A ratio of these time costs to the size of the loan (using the minimum wage and loan size as of June 30, 1985) would show that they are about 10 percent of the loan size.

Effectiveness of promoters. Community members surveyed were asked to rank promoters in terms of their effectiveness in certain tasks. The results are reported in Table V.6. In none of the tasks were the promoters uniformally perceived by the members as being highly effective, The performance of the promoters was ranked highest for establishing and implementing the FRC. An estimated 75.9 percent of the members thought the promoters were some help or a lot of help in implementing the FRC and about 68 percent were so ranked in establishing the FRC. The promoters were ranked low in providing technical assistance and other services to the community.

TABLE V.6

COMMUNITY MEMBERS PERCEPTION OF EFFECTIVENESS
OF PROMOTER IN SPECIFIC TASKS

| TASK | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| TECHNICAL ASSISTANCE | | | |
| A lot | 17.60 | 0.0027 | 10.20 |
| Some | 25.40 | 0.0032 | 11.10 |
| Little | 16.70 | 0.0009 | 5.80 |
| None | 38.70 | 0.0073 | 16.70 |
| FRC ESTABLISHMENT | | | |
| A lot | 18.43 | 0.0029 | 10.67 |
| Some | 49.76 | 0.0038 | 12.14 |
| Little | 17.69 | 0.0013 | 6.98 |
| None | 13.92 | 0.0043 | 12.95 |
| FRC IMPLEMENTATION | | | |
| A lot | 35.14 | 0.0176 | 26.08 |
| Some | 40.76 | 0.0051 | 14.04 |
| Little | 20.76 | 0.0003 | 3.64 |
| None | 15.73 | 0.0051 | 14.12 |
| OTHER APART FROM FRC | | | |
| A lot | 17.91 | 0.0022 | 9.16 |
| Some | 20.33 | 0.0018 | 8.45 |
| Little | 17.30 | 0.0012 | 6.71 |
| None | 43.53 | 0.0061 | 15.33 |

SOURCE: Members' survey.

The survey results shows that the promoters were present at most all of the assembly meetings prior to and during disbursement. It was at these meetings that an estimated 55.1 percent of the members first learned about the program. Another 30.1 percent first learned of the program from conversations with fellow community members. The members were asked to rate the effectiveness of the promoter in explaining the concept of the FRC at these meetings. The results are presented in Table V.7. An estimated 12.8 percent ranked the promoter's performance as very useful. Another 44.0 percent ranked it average, 29.9 percent unuseful and 16.5 percent did not recall him making any presentation. These results suggest that effort should be made to improve the effectiveness of tne promoter at these meetings.

Effectiveness of Credit Committee. Community members were asked to evaluate their community committee with respect to certain characteristics that were indicators of their confidence in the committee to act in a responsible manner; i.e. factors that would show the members' confidence in the committee to properly administer the FRC. The results are presented in Table V.8.

It is clear that the committee members were basically confident in the committees' ability to carry out their tasks. There was a high degree of confidence in the committees' ability to manage the FRC and in their honesty. Members were less confident in the committees' ability to market the indexed

TABLE V.7

COMMUNITY MEMBERS PERCEPTION OF EFFECTIVENESS OF PROMOTERS IN EXPLAINING FRC PROGRAM PRIOR TO DISBURSEMENT OF FUNDS

| RANKING | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| Very useful | 12.7 | 0.0005 | 4.30 |
| Average | 44.0 | 0.0030 | 10.80 |
| Unuseful | 29.9 | 0.0016 | 7.90 |
| Didn't do it | 16.5 | 0.0060 | 15.20 |

SOURCE: Members' survey.

TABLE V.8

COMMUNITY MEMBERS DEGREE OF CONFIDENCE IN
COMMUNITY COMMITTEE WITH RESPECT TO CERTAIN CHARACTERISTICS
AFTER EXPERIENCE WITH FRC

| CHARACTERISTICS | ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|---|
| ABILITY TO MANAGE FRC | | | |
| High | 61.10 | 0.0056 | 15.00 |
| Average | 37.20 | 0.0057 | 14.80 |
| Little | 9.00 | 0.0016 | 7.90 |
| MARKET THE INDEXED PRODUCT | | | |
| High | 31.50 | 0.0051 | 14.10 |
| Average | 37.30 | 0.0026 | 10.10 |
| Little | 35.70 | 0.0067 | 16.10 |
| HONESTY | | | |
| High | 41.50 | 0.0079 | 17.40 |
| Average | 47.80 | 0.0055 | 14.50 |
| Little | 10.40 | 0.0011 | 6.40 |
| DON'T DO FAVORS FOR SOME MEMBERS THAT THEY DON'T DO FOR OTHERS | | | |
| High | 28.70 | 0.0050 | 13.80 |
| Average | 44.90 | 0.0043 | 12.80 |
| Little | 25.40 | 0.0082 | 17.70 |

SOURCE: Members' survey.

product. In this regards the members responses were quite equally distributed over the whole range of confidence. This may reflect a reason for the lack of member confidence in the FINCA marketing program.

Timeliness of Credit. As shown in Table V.9, there was little disagreement among the members that the credit arrived in an opportune and timely fashions; 87.6 percent were satisfied with the timing of the disbursement. This may be related, however, to the fact that much of the credit was not used for agricultural production purposes, but, rather, was used for many other purposes that did not have a fixed time schedule; for example, the purchase of clothing and household articles.

## Conclusions

The analysis of the CDS showed it to have both strengths and weaknesses. Dispite claims of FINCA that no interest is charged , there is an implicit interest rate that the borrowing member pays. For the past year this nominal rate were shown to be high relative to other institutional lenders, a fact that would encourage community members to prefer other sources of credit were they readily available. The real rate, however, was negative which implies both a transfer of resources to borrowers and decapitalization of the FINCA Revolving Credit Fund as well as the FRCs. The interest rate was shown to fall about one third when members did not capitalize the

TABLE V.9

COMMUNITY MEMBERS PERCEPTION OF TIMELINESS OF FRC CREDIT

| ESTIMATED PERCENT OF MEMBERS WITH PERCEPTION | VARIANCE | % MARGIN OF ERROR AT 95% CONFIDENCE LEVEL |
|---|---|---|
| 87.60 | 0.0007 | 5.3 |

SOURCE: Members' survey.

FRCs. This would be a factor causing communities to repay their loans to FINCA in full, but without capitalizing the FRC. Advance payments also reduce interest charges. These facts may explain the observed tendencies for the communities to repay in advance and in full.

The descentralized structure of FINCA was shown to keep FINCA's costs of operation low at the Central Office. At the same time, however, decentralization reduces control over the regional activities, which may contribute to irregularities in the regions that decapitalize FINCA.

The terms of the loans in the program were found lacking in terms of specification of an optimal repayment date. Rather than specify repayment at the time of harvest it might be better to make them come due at a time when the prices for the indexed products are more favorable.

The egalitarian criterion in the loans is also subject to criticizm because the credit needs of all members in the case of individual loans are not equal. For communal purpose loans the egalitarian feature is more defensible.

The proceedures of the credit delivery system were shown to be good for rapid disbursement of funds, but were lacking for developing solid and well- functioning FRCs. The work of the promoters needs to be upgraded. Members expressed confidence in the committees, but it appears more attention needs to be paid to educating the community and especially the credit committee in their role in managing the FRC and in educating the community about the program.

The evaluation uncovered no evidence that the marketing system was functioning. The survey showed that members were totally ignorant of the possibilities for group marketing.

The analysis showed that credit was delivered in a timely manner. The credit delivery system was shown to function as programmed with respect to the number of meetings. Yet, the question must be raised if there was adequate time given to educating the members about the program.

The members borrower transaction costs were fund to be low. All costs were in time -- a total of about two work days -- spent in meetings and travel to and from the meetings.

In contrast, FINCA's administrative costs were shown to be very high relative to the size of their portfolio and even were farly high when measure on a community or member served basis. These results are alarming because it shows the high degree of subsidization that FINCA will need to cover its administrative and operation costs.

## Recomendations

1. Do not lower nominal interest rates charged to borrowers. Indeed they might be raised to allow the communities to pay interest to FINCA and to avoid negative real rates. Moreover, it is important to recognize that total borrowing costs consist of both interest and transaction costs. When the latter are considered, the total costs of borrowing are not high compared to other sources of credit.

2. The descentralized structure of FINCA undoubtedly reduces operations costs but also leaves the field operations subject to a lack of control. Cost efficiency means should be considered to gain more control. One way would be to eliminate the supervisors' marketing function of the FINCA amortization payments and have the communities pay FINCA in cash.

3. The loan terms should be made more flexible. There are differences in credit needs both among communities and among members within a community. Means should be established to accomodate these varied interests rather than following an equalitarian pattern at both the community and member level.

4. The program was designed for rapid disbursement of funds. The experience suggests that lending should be made with more planning and caution. This includes better selection of participating communities and more thorough study of the credit needs of each community.

5. More effort needs to be directed to educating the communities and the community committees on the operations of the credit program. This means that more time will need to be spent with each community and that promoters and supervisors will need to be better prepared to carry out their tasks.

6. Methods need to be developed to protect the real value of the FRCs between the periods of loans. For example, funds could be placed in interest earnings savings accounts.

7. Efforts need to be made to reduce the relative size of FINCA's costs, by cutting back on administrative costs and/or by increasing the size of their portfolio. In this regard, the trade-off between costs and benefits of all new proceedures that are established should be recognized and considered before implementation

## VI. GENERAL CONCLUSIONS AND RECOMENDATIONS

Detailed analysis, conclusions and recommendations are presented in chapters III - V. The reader is referred to those chapters for the details. In this chapter the concepts and recommendations are consolidated,concentrating on the key issues.

### Success in Distributing Credit

The program should be judged as a success in terms of rapidly disbursing credit to a large number of communities and families in a short period of time. In this context, it served to help recapitalize some of the communities that were severely impacted by the 1983 draught. Although the economy was badly distorted by the crisis and hyperinflation the program made strong advances. An important factor in this success was the ability of RDS to rapidly assemble a team to implement an already existing model in a large number of communities that had previously by been identified through their participation in the PL480 Rice Sale Program that RDS had administered.

Although the program was successful in distributing credit on a wide scale in the first year, in the large majority of cases to farmers who had a little prior credit experience, the member survey clearly showed that a large majority of the members did not perceive the program as being a vehicle for future charge either for the community or for the economic conditions of the members. As a coroboration of this, only

about half the members wanted to participate in the FRC credit in the future. These results strongly suggest that many, community members were pleased to obtain the credit because of its ready availability and low transactions costs, but after one year's experience did not find it to their benefit to continue.

This may be explained in terms of the problems in the design of the program and in the credit delivery system with which it was implemented. Indeed, it is judgement of the evaluators that if corrections are not made that the credit program will encounter difficulties that will threaten its very existence unless the program continues to receive a high degree of subsidization. In fact, considerable evidence was uncovered in evaluation ofthe first year of operations which suggests that this disintegration has already begun. The three most critical problem areas are in capitalization, the credit delivery system, and in the structure of FINCA. There are also problems in the conditions and terms of the loans.

## Capitalization

The key feature of the program is to capitalize the community level FRCs, through loans from FINCA's Revolving Credit Fund. A key feature of the program design is to index all loans to a product to protect the real values of both funds in inflationary times. This is a desireable feature, although

as shown in this study it cannot be expected to compeltely protect the funds against inflationary erosion.

There are other features of the program design that are very problematical for capitalization, at both the levels of FINCA and the FRCs. If these are not corrected it is our judgment that the program will encounter continual and serious problems of decapitalization that will make the program continually dependent on subsidies and grants to maintain it level of capital as well as to cover its operating and administrative costs. It is our judgement that no credit program should be constructed in this manner unless there is a premise that continued subsidization is correct and feasible.

To correct the problems associated with decapitalization of the FINCA Revolving Credit Fund it is recommended that FINCA should charge interest on its loans to communities. The rate of interest should be an amount to cover the anticipated costs of FINCA's business--including expected losses from delinquency and indexation, as well as administrative, and operations costs-- and also have a surplus left over to capitalize the fund. If this is not done, FINCA will be forever dependent upon subsidies.

The central thrust of the program is to create viable FRCs through the seed money available to communities from FINCA loans and then to capitalize the FRCs as the members repay their loans to the FRC and amortize the FINCA loan. Thorough study of the program design raises serious doubts as to whether the incentives are in place to cause the capitali-

zation to occur. Symptoms of the problems are the high observed delinquency of communities in repaying their loans to FINCA, communities making complete payments to FINCA in one year rather than four; and the extreme difficulties in verification of community capitalization of the FRCs. As the program is designed, the incentives for a member or a community to capitalize the FRC are to have access to future credit of the same amount, or of a larger amount if the size of the FRC is expanded with future loans from FINCA. It is questionable if these are sufficient incentives. The above-mentioned symptoms plus the member response showing that only half of them wanted future loans from the FRCs are evidence of the problem.

It is recommended that incentives be built into the capitalization process to cause members to want to capitalize the FRCs. Suggestions include interest payments or dividends on the member's share. Such incentives might alos encourage voluntary capitalization, e.g. savings. FINCA has used non-financial incentives to encourage capitalization such as Food for Work, the USAID farm implements program, etc. Certainly these have encourage capitalization, but they should not be considered as part of the design of the credit program. Since they are temporary, they should not be relied upon to serve as a component of a long-term and viable credit program.

## Credit Delivery System

The credit delivery system is designed to rapidly form FRCs and disburse credit. As demonstrated in the first year,

the system is successful on this account. This can be attributed to its simplicity and flexibility. It has advantages of imposing low borrower transactions costs on community members and incorporating features that are common to peasant customs. Yet, because of its simplicity, these appear to create some problems. The rapid establishment of the FRC does little to educate the community members nor the community committee about the true intent of the program, e.g., to establish a viable FRC. In its present form, the program has the appearance of a quick and easy source of credit. Greater attention needs to be given to educating both the community and its leaders about the FRC, the management etc. This will require greater costs for FINCA, but it is necessary for the success of the program.

In the haste to establish FRCs and disburse credit in the first year many communities were incorporated in the programs that did not need the FINCA program. It was clear from the survey that there is quite a wide diversity among participating communities. The communities that are most disatisfied with the program are those located in more progressive and wealthier rural areas. In these cases, the communities often have access to credit form the Bolivian Agricultural Bank and other formal market sources. In contrast, the communities best served by the FINCA program are those in other lessdeveloped less-commercial regions. It is recommended that FINCA carefully screen its present set of communities, disontinue operations with those that do not want or need the FINCA

programs and concentrate on those that can benefit fromm it. The same criteria should be applied in selecting new communities for program expansion.

The FINCA credit progam is suppossed to be linked to the marketing program. The survey, however, showed little evidence of any marketing activity by the communities. Hence, it is premature to evaluate this phase of the credit delivery system. It is our view, however, that neither program is dependent on the other for success and that they can be evaluated independently. The linkage between the two is that a successful marketing program should facilitate capitalization of the FRCs and amortization of the FINCA loan because much of the community's produce will be concentrated in the hands of the community committee, and, therefore, the capitalization of the FRC can be made directly byt the committee.

## Structure

The program is descentralized which has the advantage of a small Central Office taff. Its work force is concentrated among the six regional supervisors and forty-two promoters. Whereas the descentralized operation has cost advantages it also creates problems for control and record keeping. Virtually the whole responsibility for program implementation, record keeping, etc., is in the hands of the supervisor. With their work load there are frequent delayed in filling reports in making deposits of amortization payments, etc. There is also room for irregularities in their management of funds in

their possession, and evidence that these have occurred. It is recommended that means be established to provide more control in the system. It is important that the promoters be upgraded in their training in order that they can carry out more of the tasks assigned to the supervisors, and, thus, allow the supervisor more time for management.

Although the program is designed to be low cost the evidence suggests the contrary. FINCA's administrative costs, including the costs of technical assistance, were shown to exceed the value of the portfolio. In part this is due to structural problems. Salaries and per diem are pegged to the dollar at the rate of the parallel market. The portfolio is in local currency. Therefore, with inflation the costs have risen and the value of the portfolio has fallen. Therefore,although the value of the porfolio has been protected some what by indexation there has been a widening gap between costs and portfolio. If inflation continues it will worsen. Means need to be explored to correct this situation. Costs need to be reduced, at present they contribute considerably to the need for high subsidization of the program.

The FINCA program structure has a built-in fragility on two accounts. First, as documented above it is entirely dependent on sbusidies and donations, both for its capital and for its operations expenses. Second, the key actors in the program are few. The inter-relationships between RDS, FINCA-International and the Bolivian FINCA make the program virtually depend on about two persons for its success. This places FINCA

in a precarious position should this network be disrupted or should the services of key persons no longer be available.

## Terms

There is agreement that the size of the loans made under the FINCA program are small. It would be desirable to increase the loan size. The matter, however, is not that simple. The question of a community or a member's credit absorpting capacity needs to be studied. If loans are increased in size there may be more repayment problems.

A related problem is the eqalatarian design of the program which distributes credit among community members within communities, and to a large extent across communities, on an equal basis. This design does not take account of different needs both within and across communities for different credit needs. It is recommended that this be change.

There is also an apparent problem is establishing repayment dates. At present these dates are fixed but in the final analysis are considered "flexible" by FINCA to accomodate community repayment and the supervisors work schedules. It is recommended that realistic dates be established, perhaps to take account of times when market conditions for the sale of the indexed product are higher.

## Final Comments

The FINCA program has admirable goals and enthusiastic leadership. Its credit program is an integral part of the overall design for community development. Yet, the credit program has some serious defects in design and operations that need to be corrected in order to make it a viable long-run program that can continue to operate without continued need for subsidization.

It is hoped that this evaluation will be useful to both FINCA and USAID in their decisions about program development in Bolivia and in the other nations where the program is established.